

THE CITY OF ALEXANDER CITY

SEWER IMPROVEMENTS

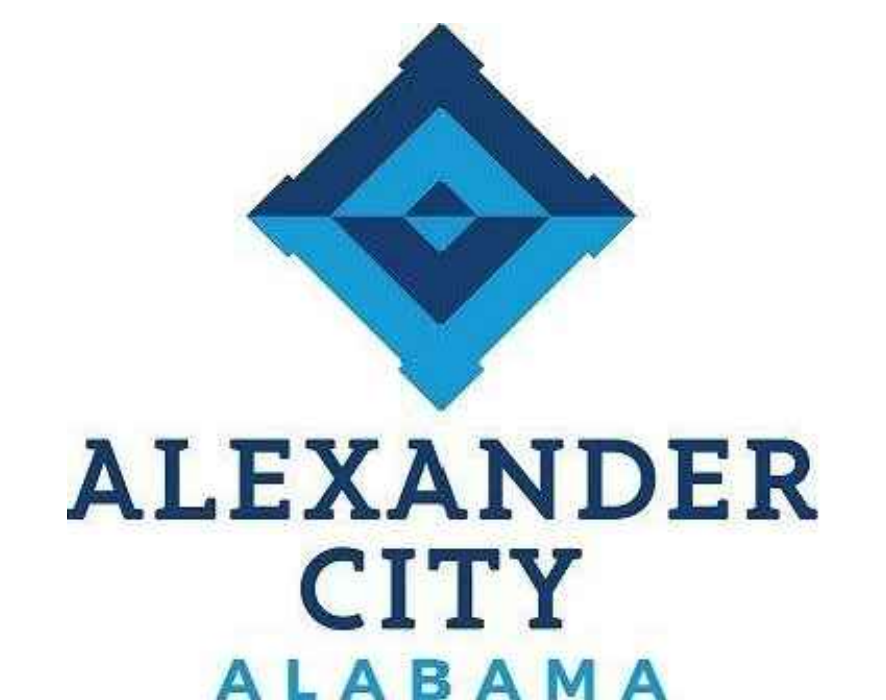
SUGAR CREEK WWTP CLARIFIER #1 IMPROVEMENTS

JUNE 2022

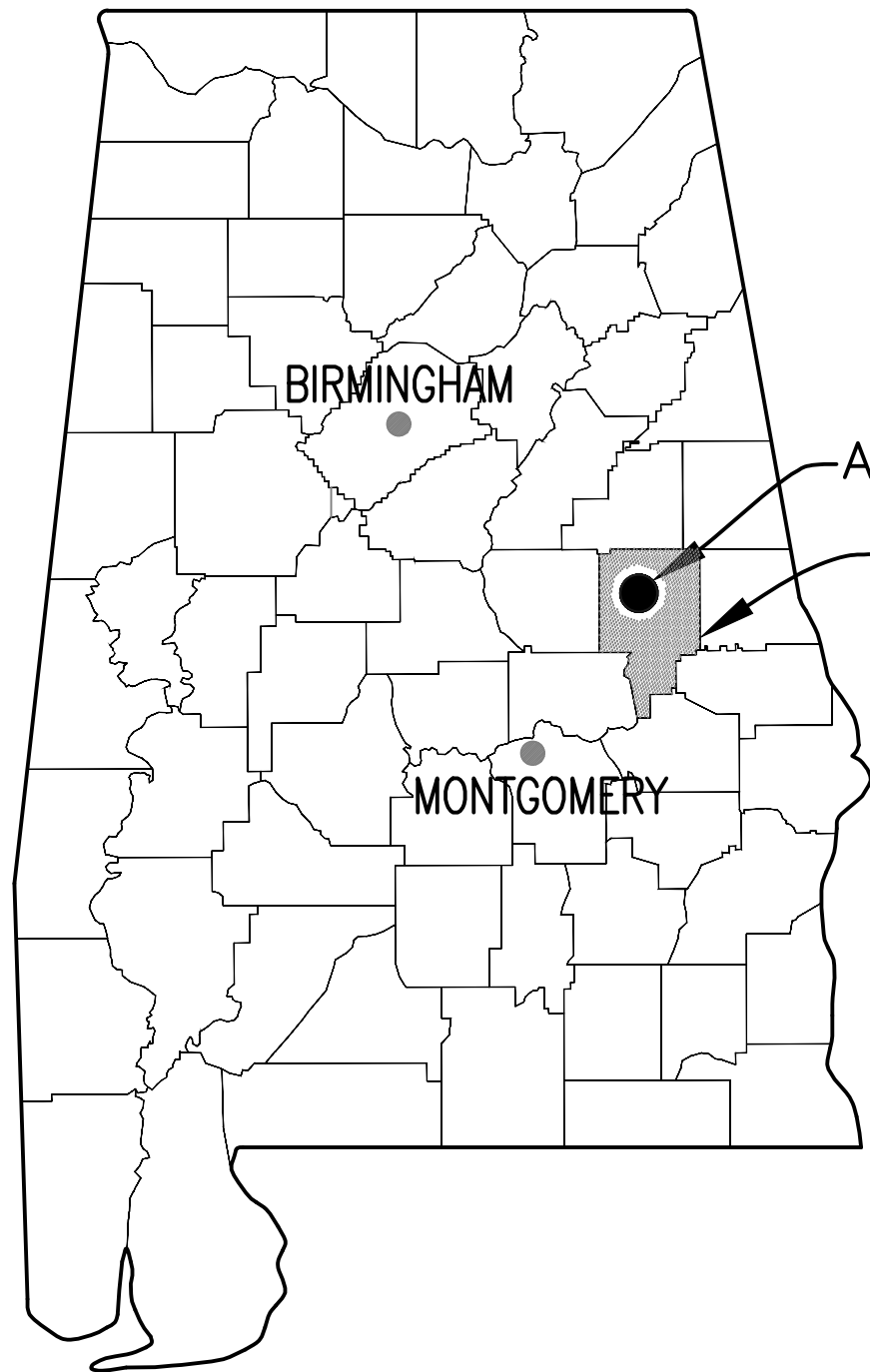
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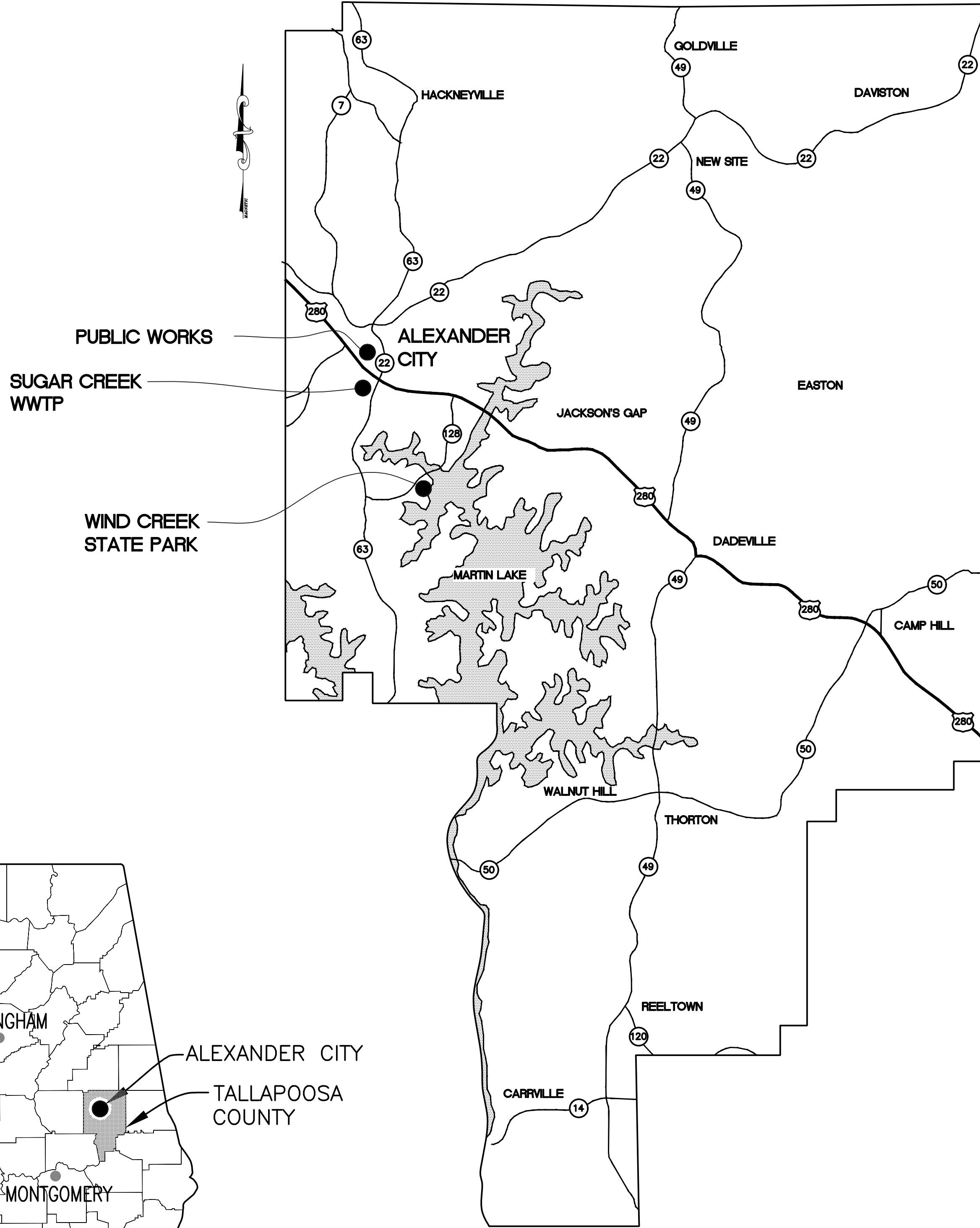
Municipal
Consultants,
Inc. Birmingham, Alabama



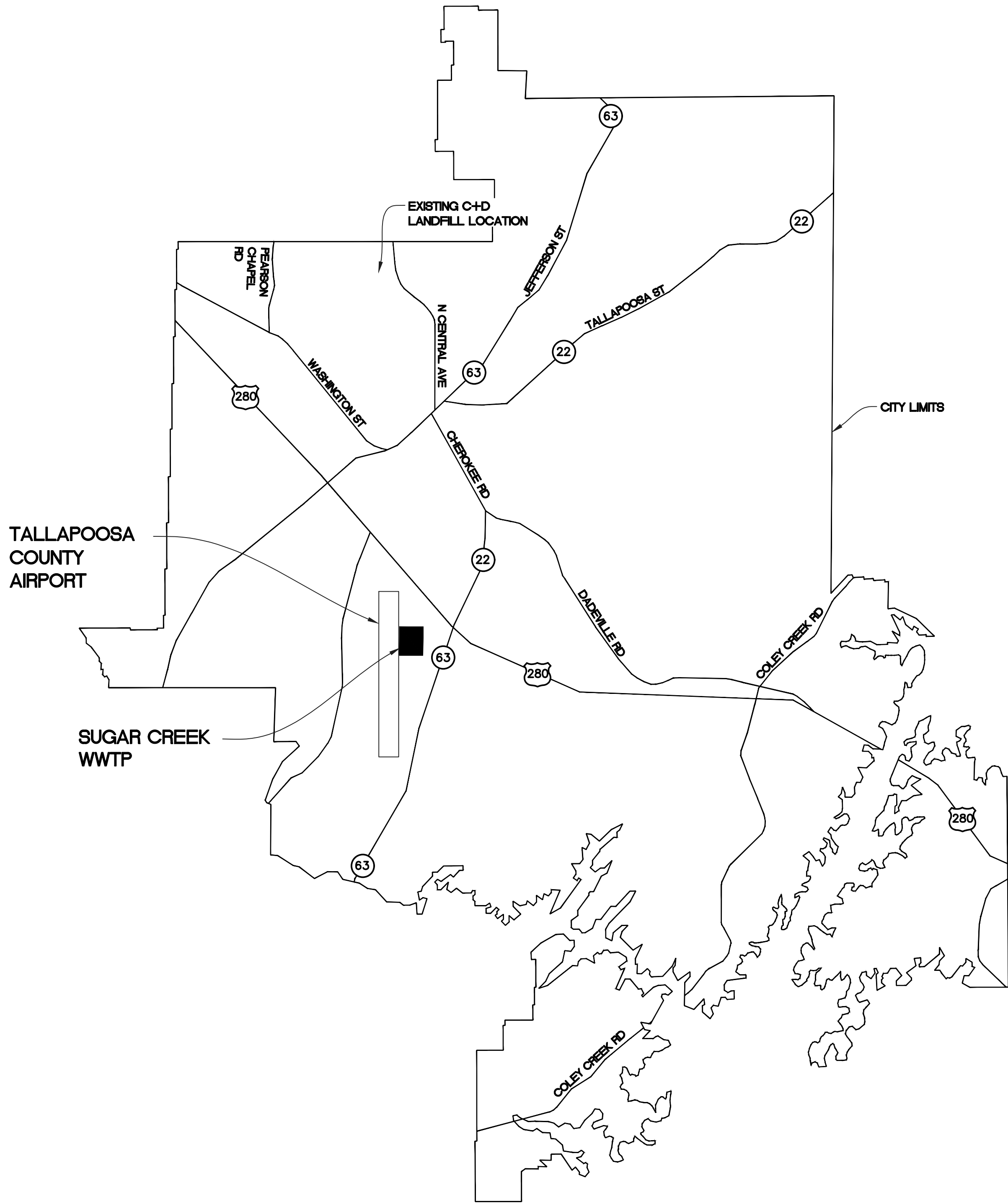
BID SET



ALABAMA MAP



TALLAPOOSA COUNTY, ALABAMA



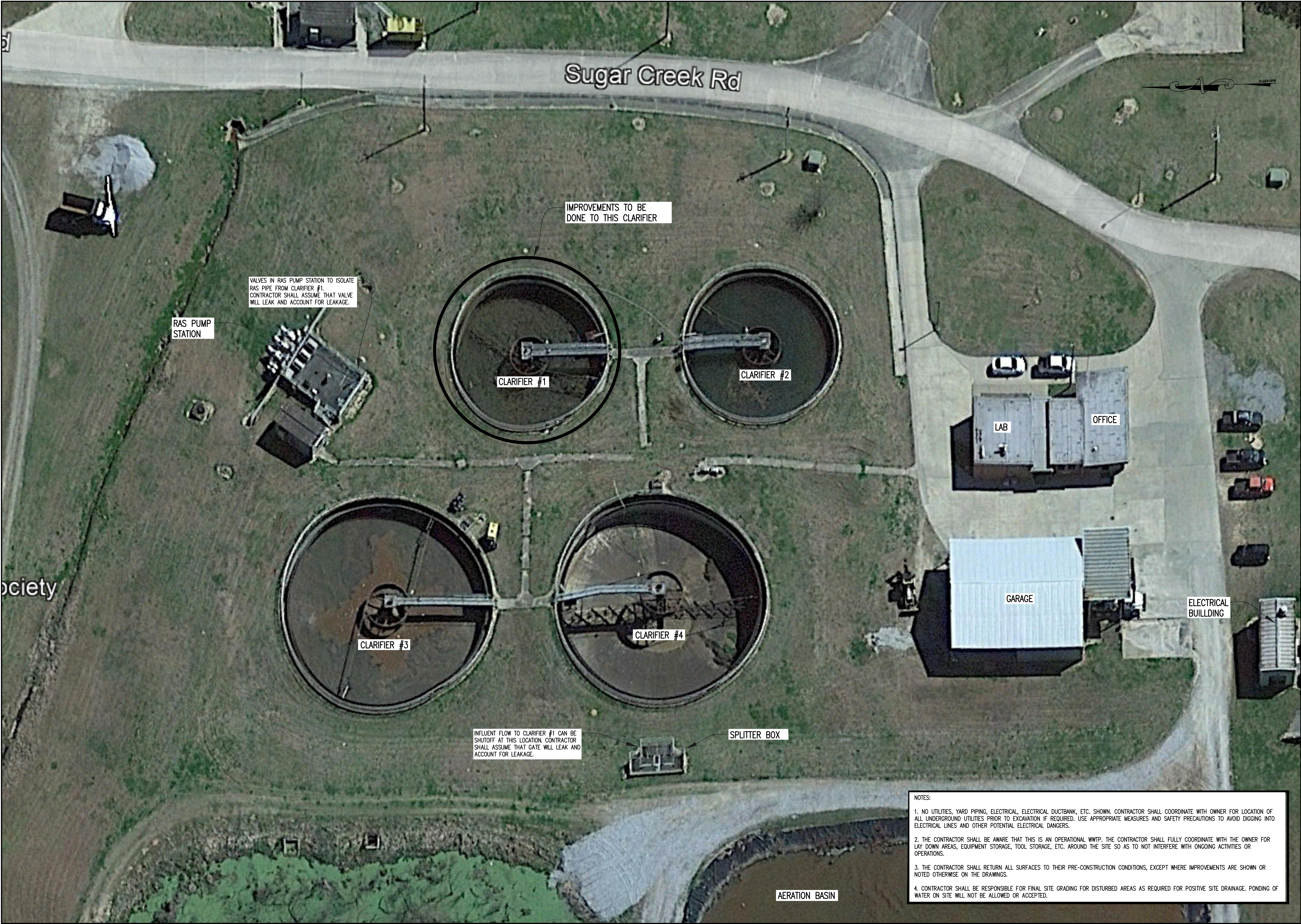
ALEXANDER CITY LIMITS



06-08-22

BAR = 1"

Drawing Project No. Date Scale Sheet	Title	
	LOCATION MAP	
	6-2022	
	NONE	
	1	BID SET




NOTES:

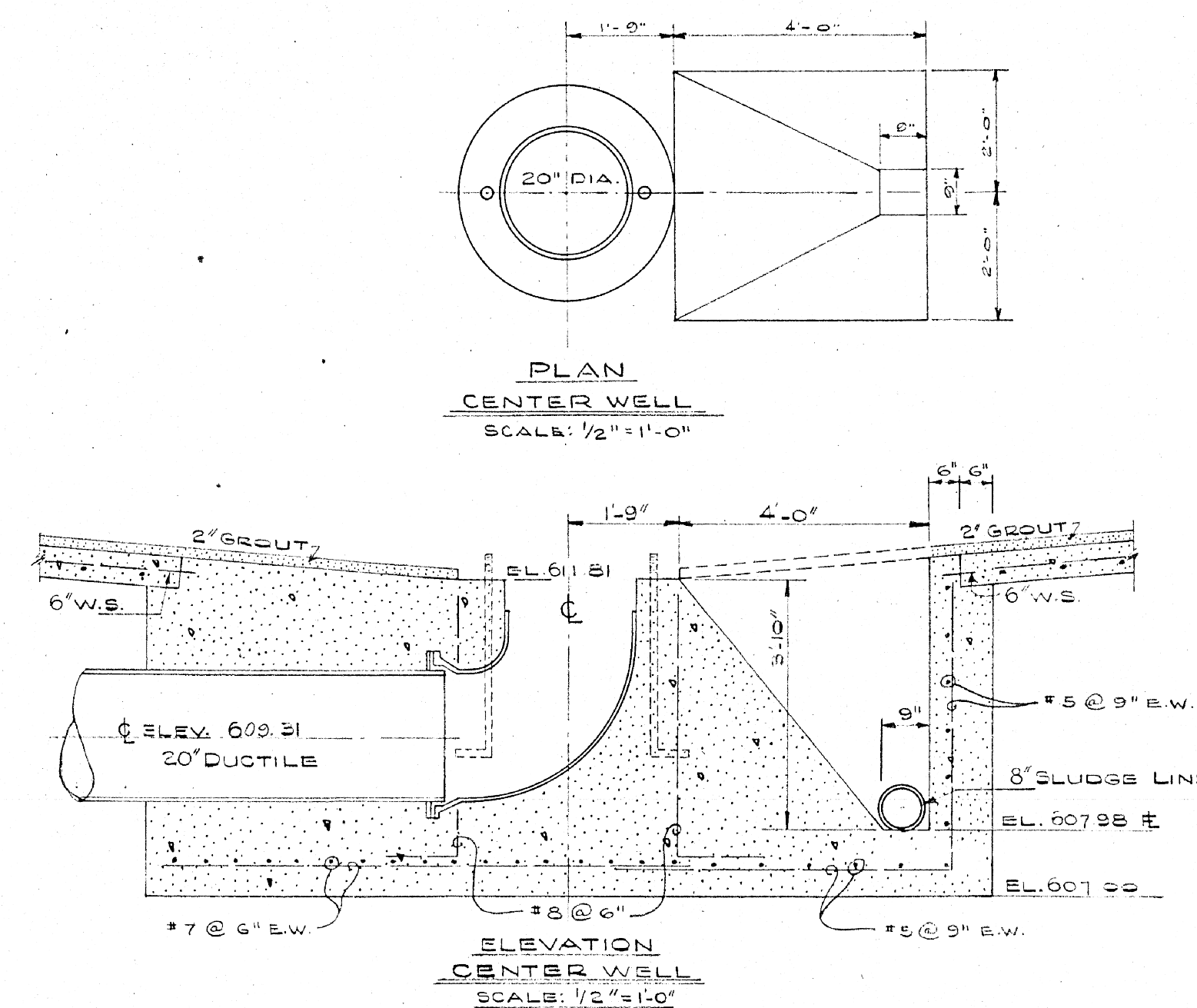
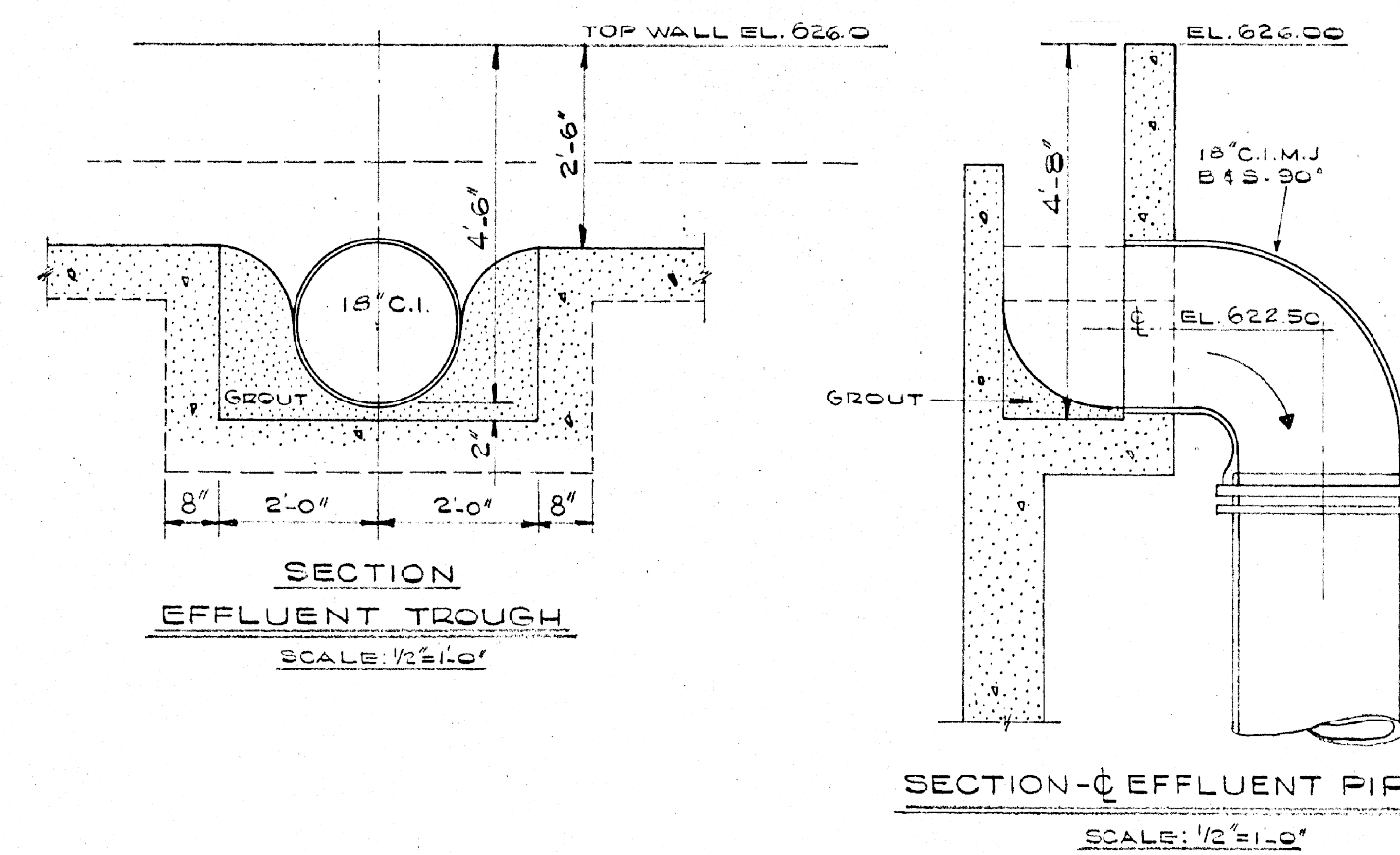
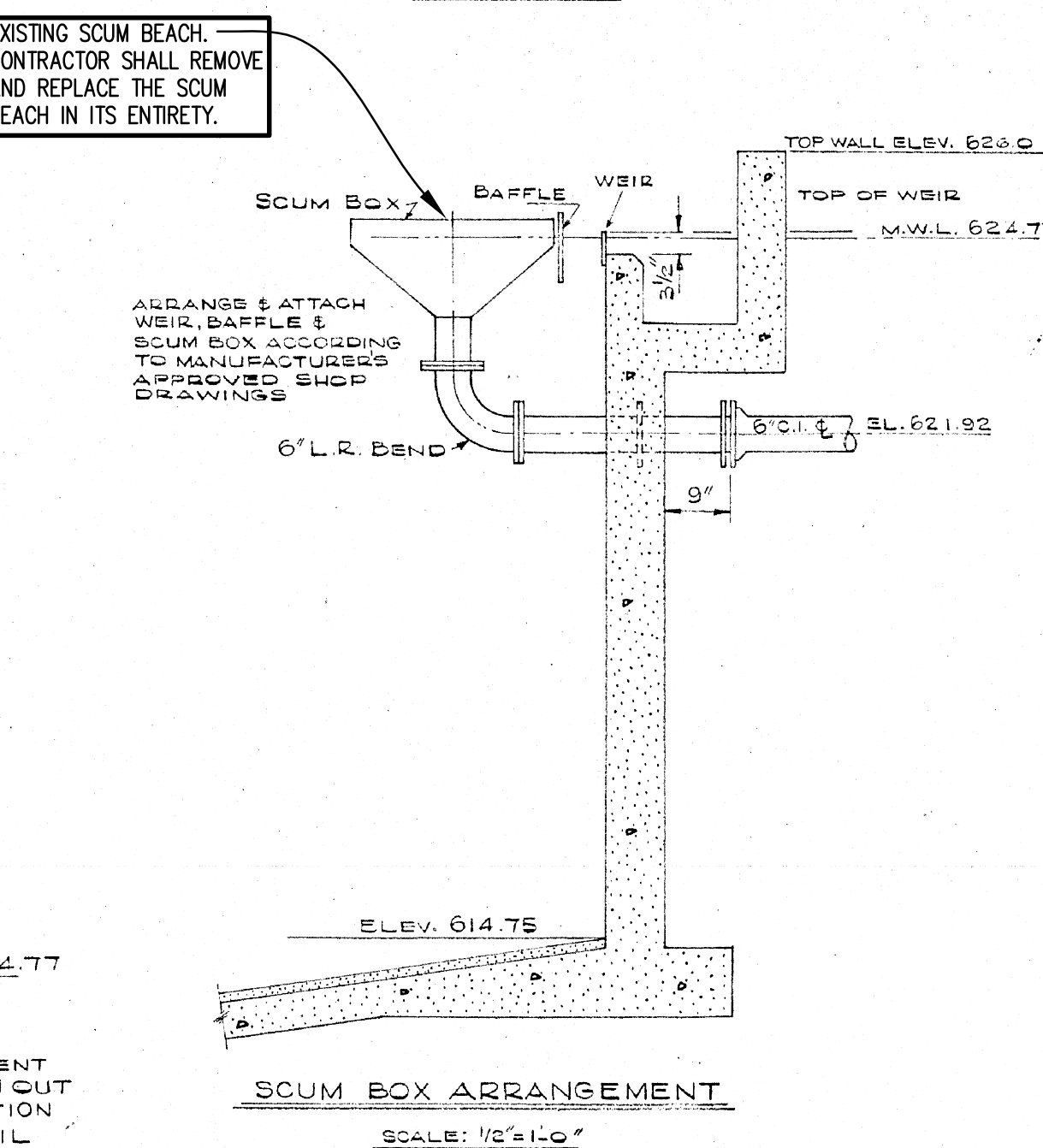
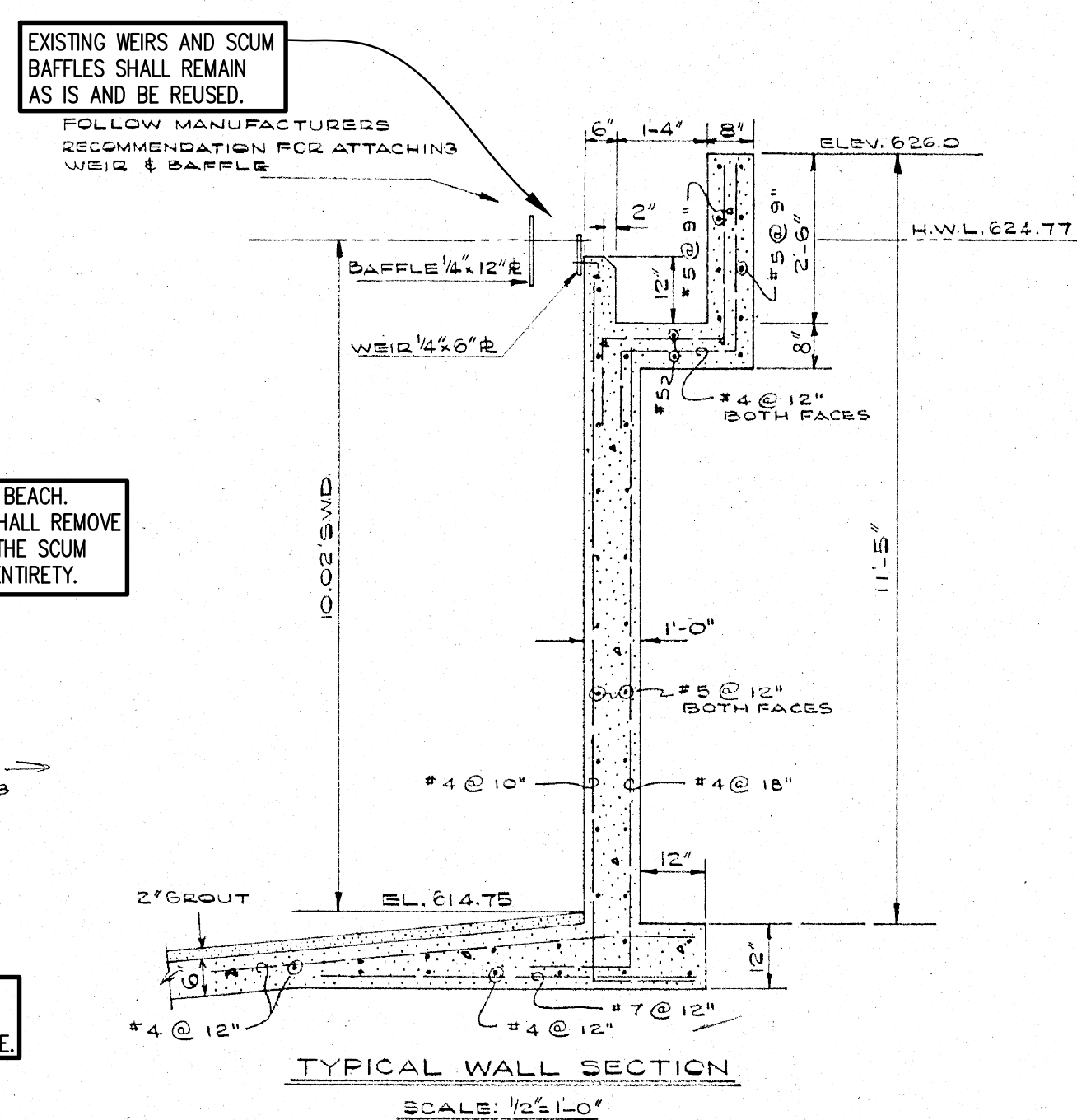
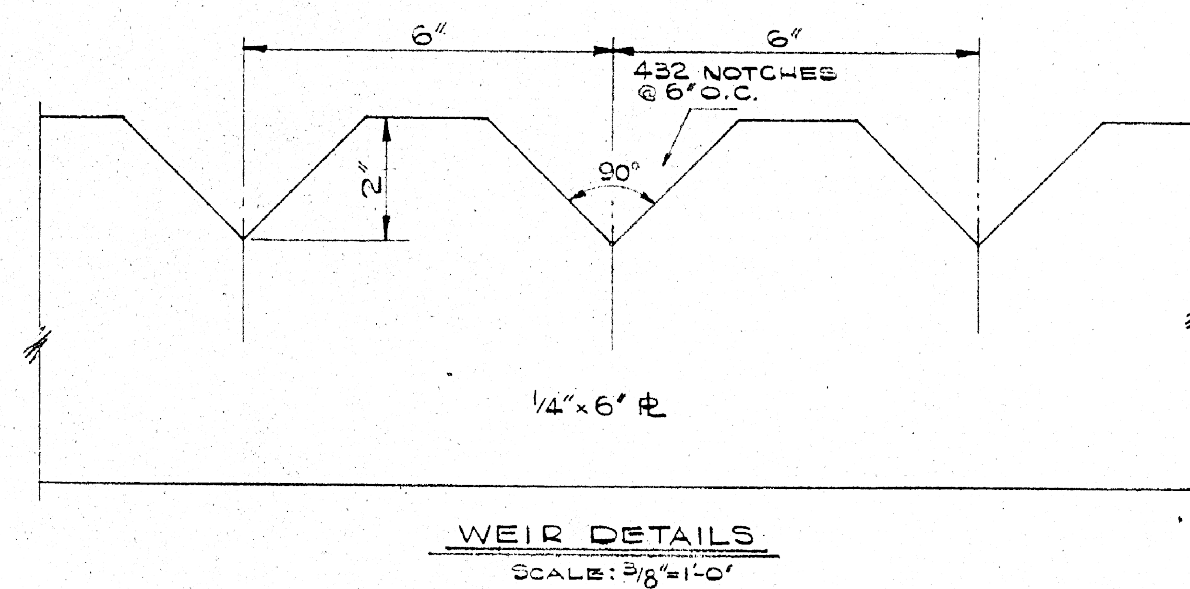
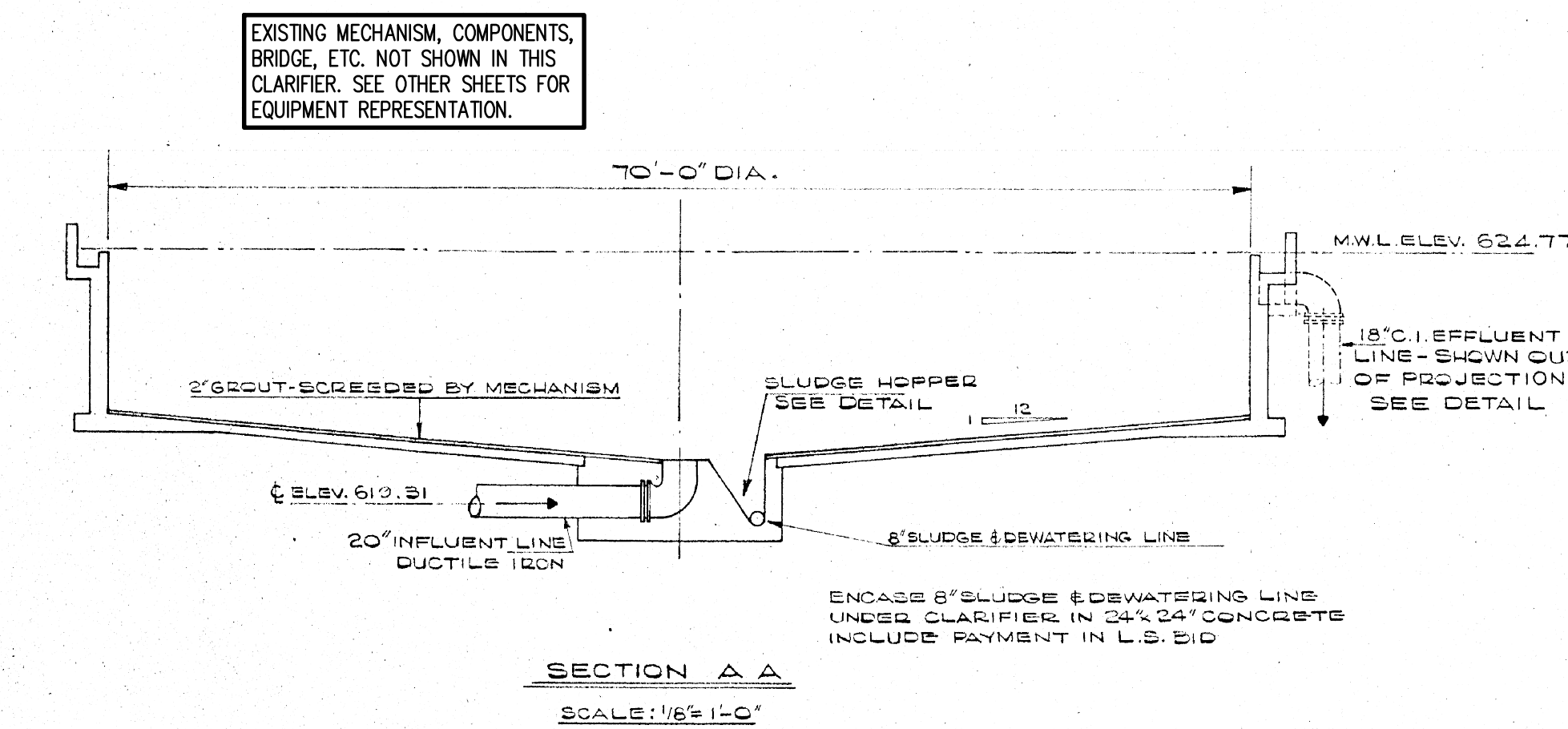
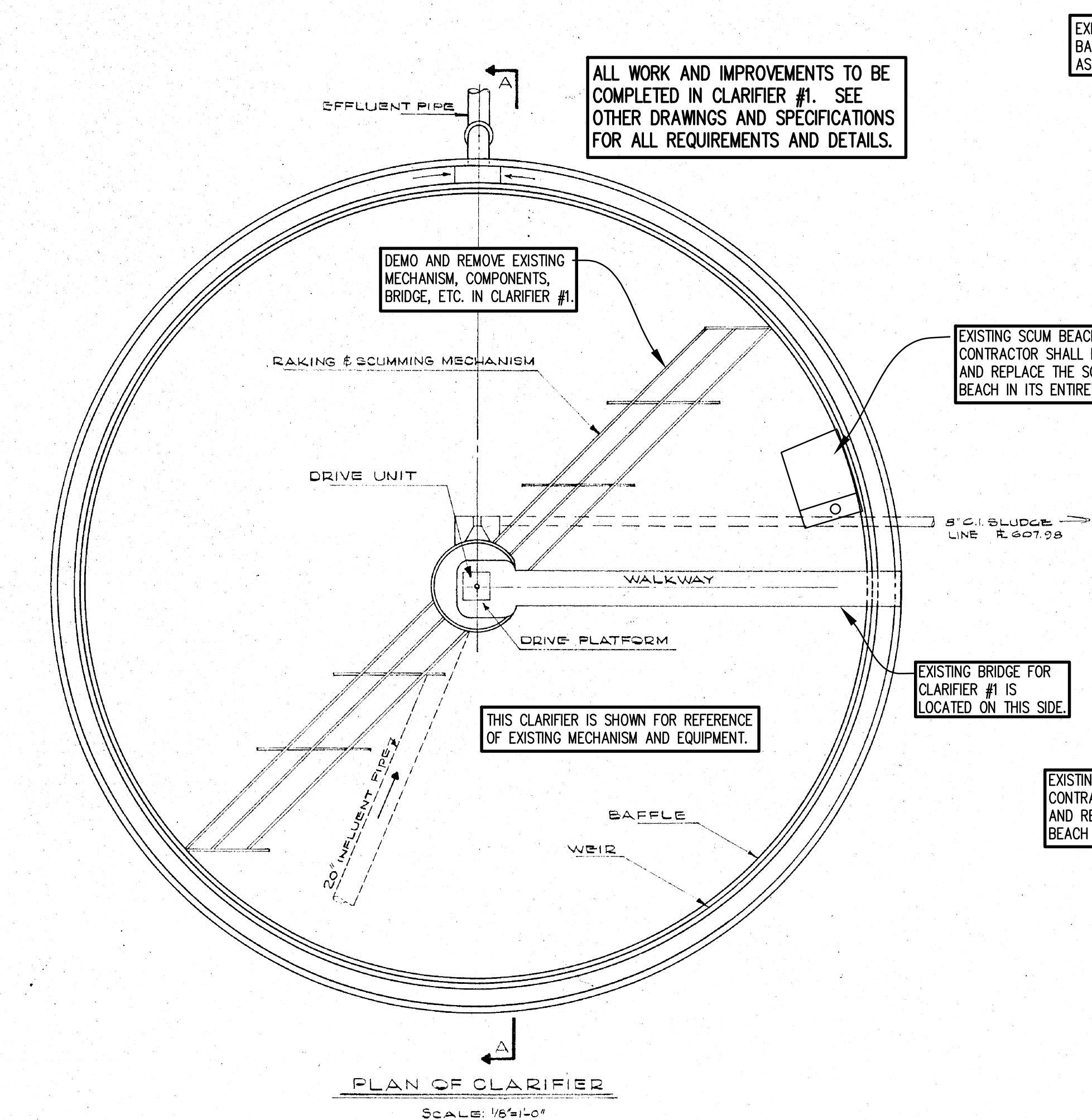
1. NO UTILITIES, YARD PIPING, ELECTRICAL, ELECTRICAL DUCTBANK, ETC. SHOWN. CONTRACTOR SHALL COORDINATE WITH OWNER FOR LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO EXCAVATION IF REQUIRED. USE APPROPRIATE MEASURES AND SAFETY PRECAUTIONS TO AVOID DIGGING INTO ELECTRICAL LINES AND OTHER POTENTIAL ELECTRICAL DANGERS.

2. THE CONTRACTOR SHALL BE AWARE THAT THIS IS AN OPERATIONAL WWTP. THE CONTRACTOR SHALL FULLY COORDINATE WITH THE OWNER FOR LAY DOWN AREAS, EQUIPMENT STORAGE, TOOL STORAGE, ETC. AROUND THE SITE SO AS TO NOT INTERFERE WITH ONGOING ACTIVITIES OR OPERATIONS.

3. THE CONTRACTOR SHALL RETURN ALL SURFACES TO THEIR PRE-CONSTRUCTION CONDITIONS, EXCEPT WHERE IMPROVEMENTS ARE SHOWN OR NOTED OTHERWISE ON THE DRAWINGS.

4. CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL SITE GRADING FOR DISTURBED AREAS AS REQUIRED FOR POSITIVE SITE DRAINAGE. PONDING OF WATER ON SITE WILL NOT BE ALLOWED OR ACCEPTED.

Drawing		Title	THE CITY OF ALEXANDER CITY	Municipal Consultants, Inc.
Project No.				
Date	6-2022	EXISTING SITE PLAN	SUGAR CREEK WWTP CLARIFIER #1 IMPROVEMENTS	200 Century Park South, Suite 212 Birmingham, Alabama 35226 (205) 622-0387
Scale	1" = 20'			
Sheet	3	BID SET	2022	
				
			06-08-22	
			BAR = 1"	
			NOT VALID WITHOUT SIGNATURE	

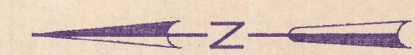


1. CONTRACTOR SHALL REMOVE THE EXISTING SCUM BEACH IN ITS ENTIRETY, CUT/GRIND ALL ANCHOR BOLTS FLUSH WITH SURROUNDING CONCRETE.
2. NEW SCUM BEACH SHOULD BE INSTALLED IN SAME GENERAL LOCATION.
3. EXISTING 6" DISCHARGE PIPING SHALL BE SANDBLASTED AND PRIMED WITH TNEMEC SERIES N140. CONTRACTOR SHALL MODIFY AND/OR PROVIDE NEW 6" D.I. DISCHARGE PIPE AND/OR FITTINGS TO WORK WITH NEW SCUM BEACH.
4. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE COATED WITH 2 COATS OF TNEMEC 142.

- NOTES:
1. CONTRACTOR SHALL REMOVE ENTIRE CLARIFIER MECHANISMS, INCLUDING BUT NOT LIMITED TO THE CENTER PIER, ARMS, TRUSSES, INFLUENT WELL, DRIVE, BRIDGE, SCUM BEACH, ETC.
 2. EXISTING EFFLUENT WEIRS AND SCUM BAFFLES SHALL REMAIN AND BE REUSED AS IS.

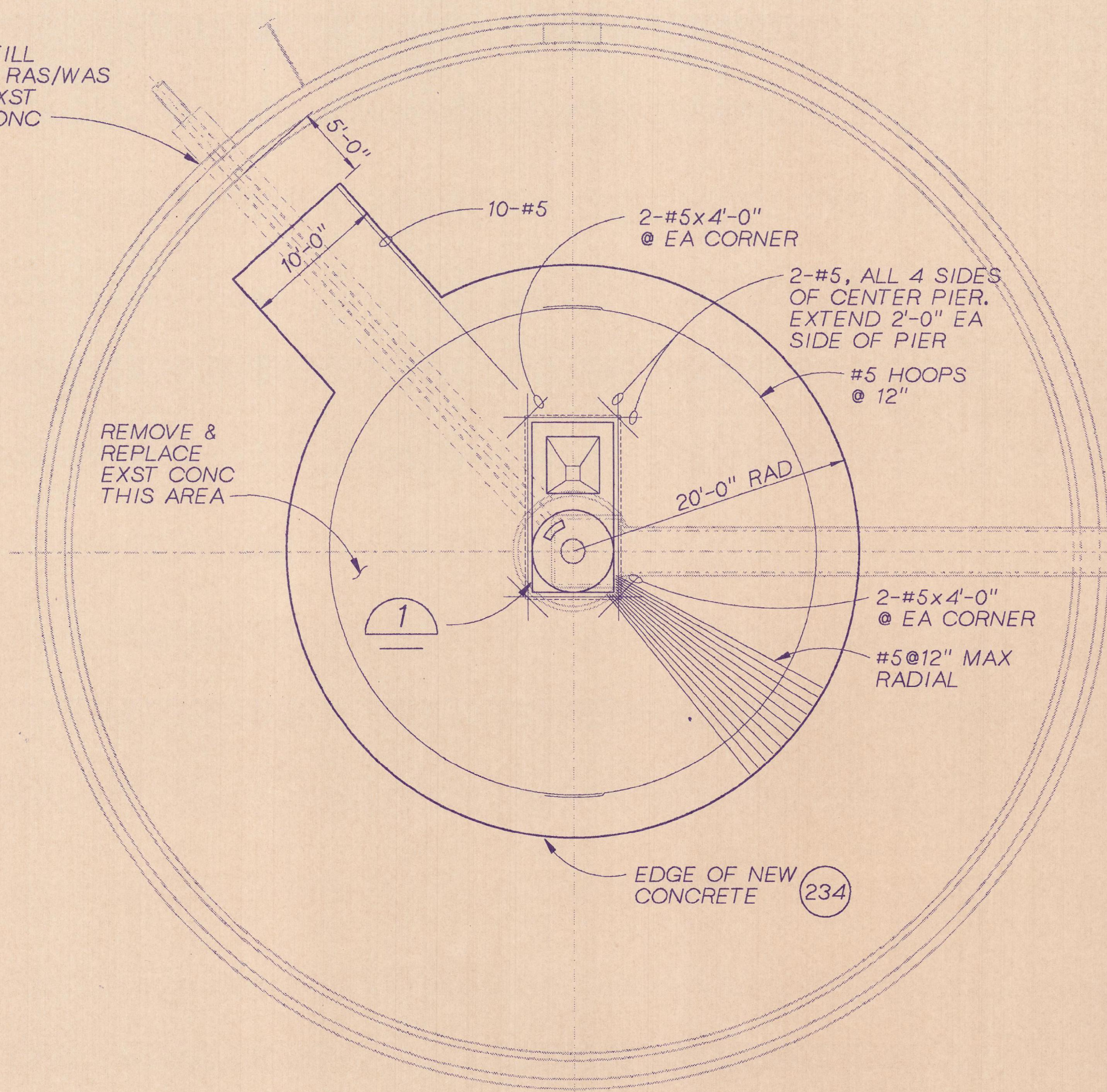
NOTE: THIS DRAWING WAS CREATED FROM SCANNED AS-BUILT DRAWINGS THAT WERE PRODUCED BY OTHERS WHEN THE ORIGINAL WASTEWATER TREATMENT PLANT WAS CONSTRUCTED AND/OR FROM FUTURE ADDITIONS/MODIFICATIONS. THE SCANNED AS-BUILT DRAWINGS HAVE NOT BEEN VERIFIED AND ARE ONLY BEING PROVIDED FOR GENERAL REFERENCE AND INFORMATIONAL PURPOSES. ANY USE OF THE AS-BUILT DRAWING INFORMATION IS AT THE CONTRACTOR'S SOLE RISK AND NO PAYMENT WILL BE MADE FOR DISCREPANCIES FOUND IN THE FIELD. THE CONTRACTOR SHALL VERIFY ANY AND ALL PERTINENT INFORMATION AS REQUIRED PRIOR TO BIDDING. THE CONTRACTOR SHOULD EXPECT REAL WORLD CONDITIONS TO DIFFER FROM THE SCANNED AS-BUILT DRAWING.

REVISIONS		<p>GOODWIN ENGINEERS OF THE SOUTH INC. CONSULTING ENGINEERS — BIRMINGHAM, ALABAMA</p> <p>ALEXANDER CITY, ALA.</p>	DESIGNED BY
			DRAWN BY
			TRACED BY
			CHECKED BY

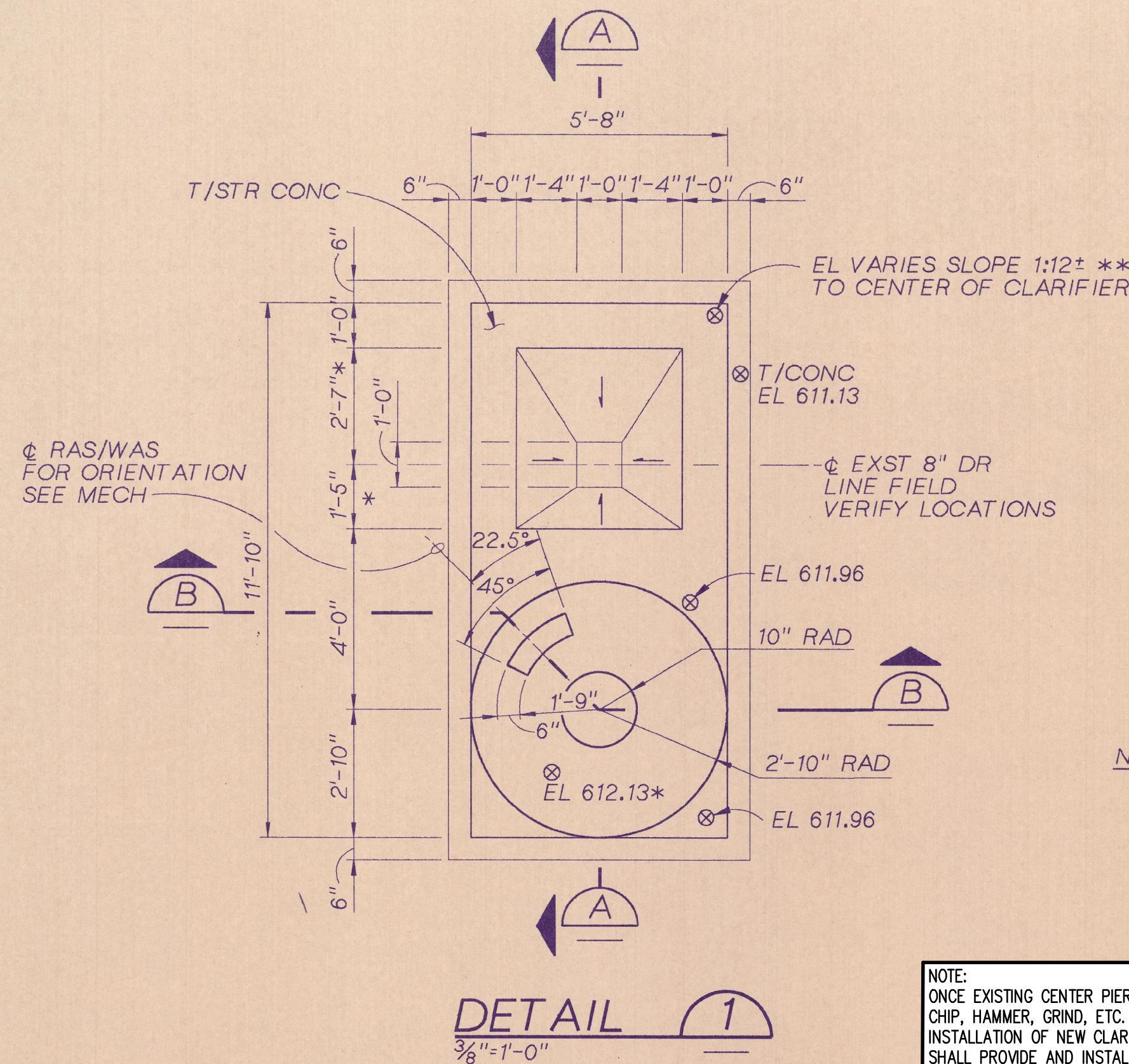


ALL WORK AND IMPROVEMENTS TO BE COMPLETED IN CLARIFIER #1. SEE OTHER DRAWINGS AND SPECIFICATIONS FOR ALL REQUIREMENTS AND DETAILS.

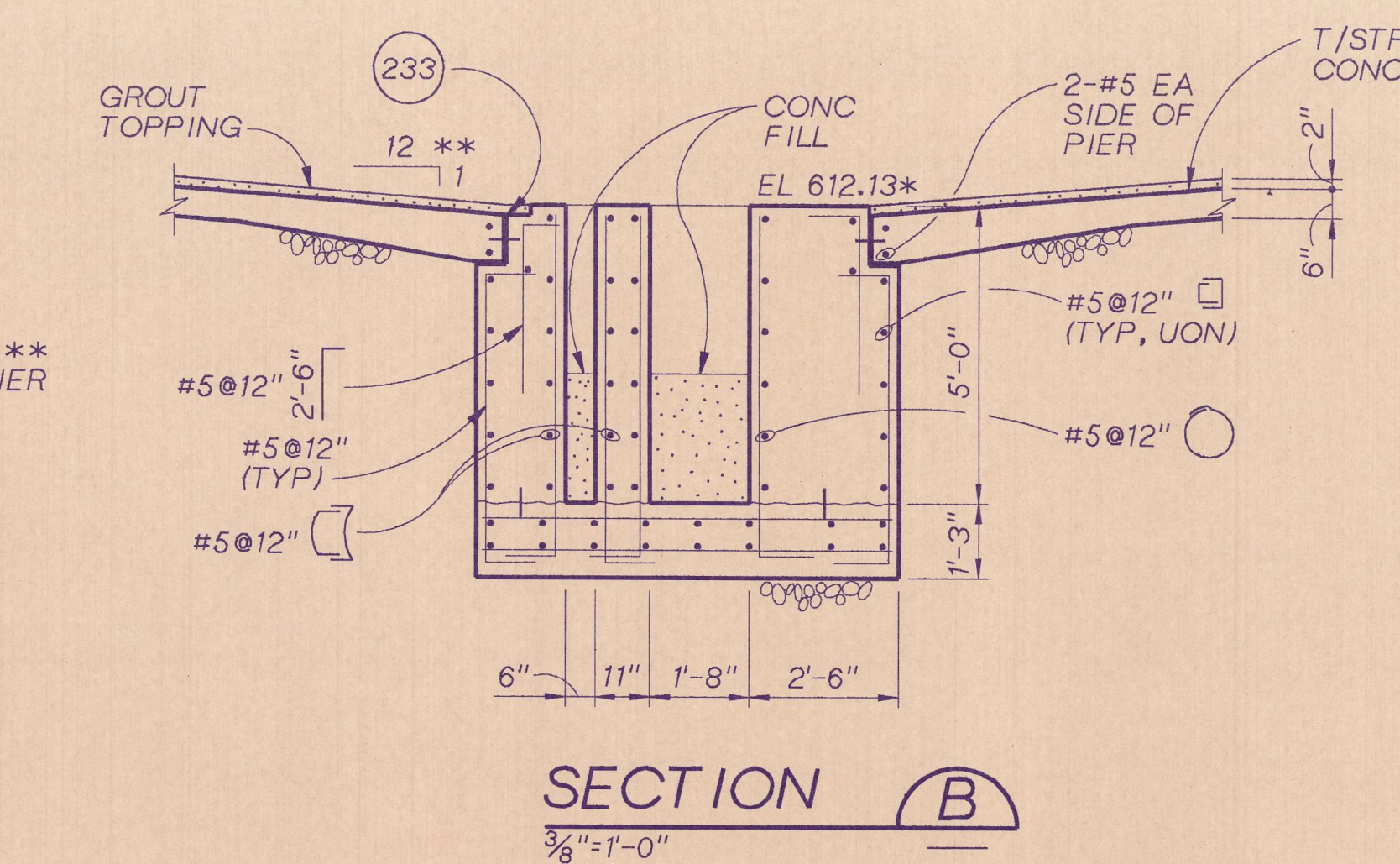
COMPLETELY FILL AREA AROUND RAS/WAS LINE UNDER EXST FOOTING W/CONC



BOTTOM PLAN
1/8"=1'-0"



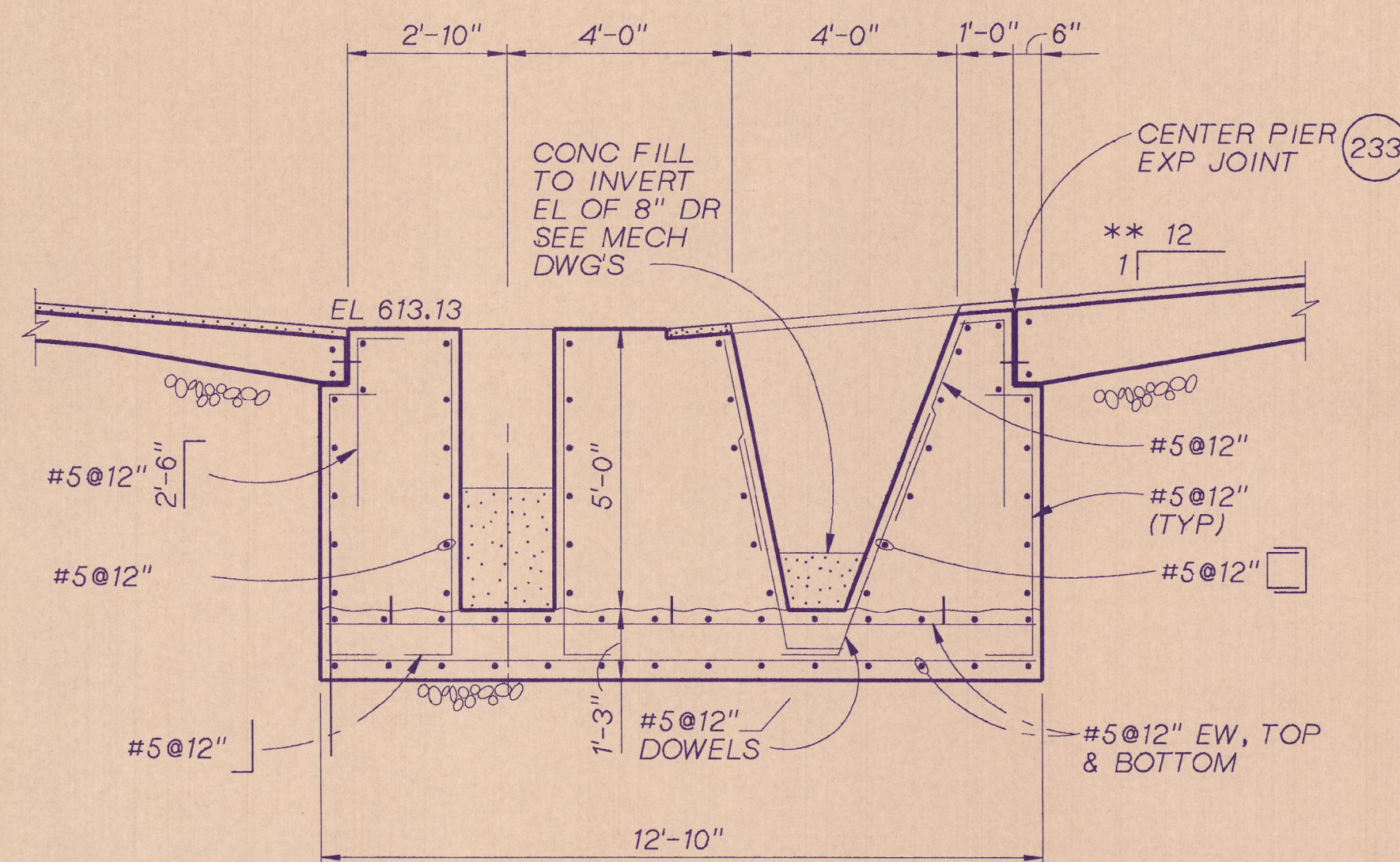
DETAIL 1
3/8"=1'-0"



SECTION B
3/8"=1'-0"

NOTES:
* FIELD VERIFY
** MATCH EXISTING

NOTE:
ONCE EXISTING CENTER PIER IS REMOVED, CONTRACTOR SHALL CHIP, HAMMER, GRIND, ETC. LEVELING GROUT AS REQUIRED FOR INSTALLATION OF NEW CLARIFIER CENTER PIER. CONTRACTOR SHALL PROVIDE AND INSTALL ALL ANCHOR BOLTS, HARDWARE, EPOXY GROUT AND NON-SHRINK GROUT FOR LEVELING/INSTALLING NEW CENTER PIER AS RECOMMENDED AND REQUIRED BY THE CLARIFIER MANUFACTURER.



SECTION A
3/8"=1'-0"

NOTE:
THIS DRAWING WAS CREATED FROM SCANNED AS-BUILT DRAWINGS THAT WERE PRODUCED BY OTHERS WHEN THE ORIGINAL WASTEWATER TREATMENT PLANT WAS CONSTRUCTED AND/OR FROM FUTURE ADDITIONS/MODIFICATIONS. THE SCANNED AS-BUILT DRAWINGS HAVE NOT BEEN VERIFIED AND ARE ONLY BEING PROVIDED FOR GENERAL REFERENCE AND INFORMATIONAL PURPOSES. ANY USE OF THE AS-BUILT DRAWING INFORMATION IS AT THE CONTRACTOR'S SOLE RISK AND NO PAYMENT WILL BE MADE FOR DISCREPANCIES FOUND IN THE FIELD. THE CONTRACTOR SHALL FIELD VERIFY ANY AND ALL PERTINENT INFORMATION AS REQUIRED PRIOR TO BIDDING. THE CONTRACTOR SHOULD EXPECT REAL WORLD CONDITIONS TO DIFFER FROM THE SCANNED AS-BUILT DRAWING.



DSGN B. E. JOHNSON
DR M.G. FARNHAM
CHK C.H. HUNSAKER
APVD K.S. FITZGERALD

NO.	DATE	REVISION	BY	APVD

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VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

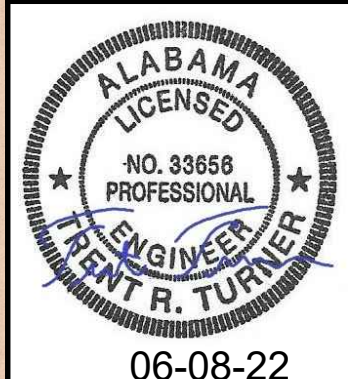
SUGAR CREEK WWTP
IMPROVEMENTS
ALEXANDER CITY, ALABAMA

STRUCTURAL
SECONDARY CLARIFIERS
DEMOLITION AND MODIFICATION
PLAN, SECTIONS & DETAILS

SHEET
DWG NO. S-7
DATE JUNE 19
PROJ MGM35166
NO.

Municipal Consultants, Inc.
200 Oaklawn Park, Suite 212
Birmingham, Alabama 35226
(205) 622-0387

THE CITY OF ALEXANDER CITY
SUGAR CREEK WWTP
CLARIFIER #1 IMPROVEMENTS



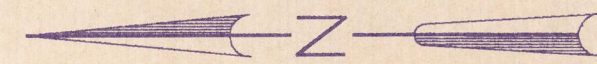
06-08-22
BAR = 1"

Title
EXISTING CLARIFIER
PLAN AND DETAILS

Drawing
Project No.
Date 6-2022
Scale N.T.S.
Sheet 5

2022

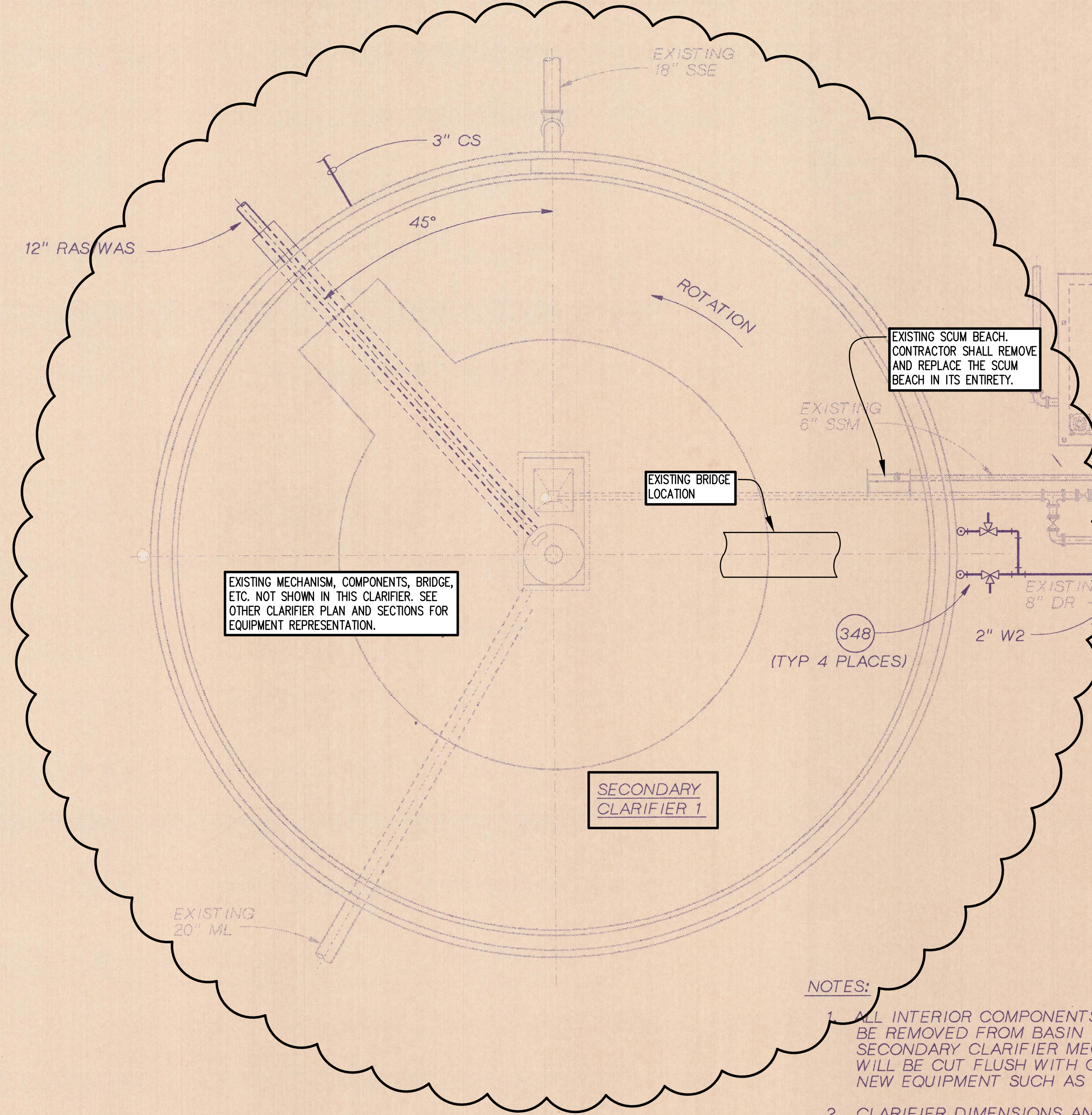
NOT VALID WITHOUT SIGNATURE



ALL WORK AND IMPROVEMENTS TO BE COMPLETED IN CLARIFIER #1. SEE OTHER DRAWINGS AND SPECIFICATIONS FOR ALL REQUIREMENTS AND DETAILS.

NOTES:

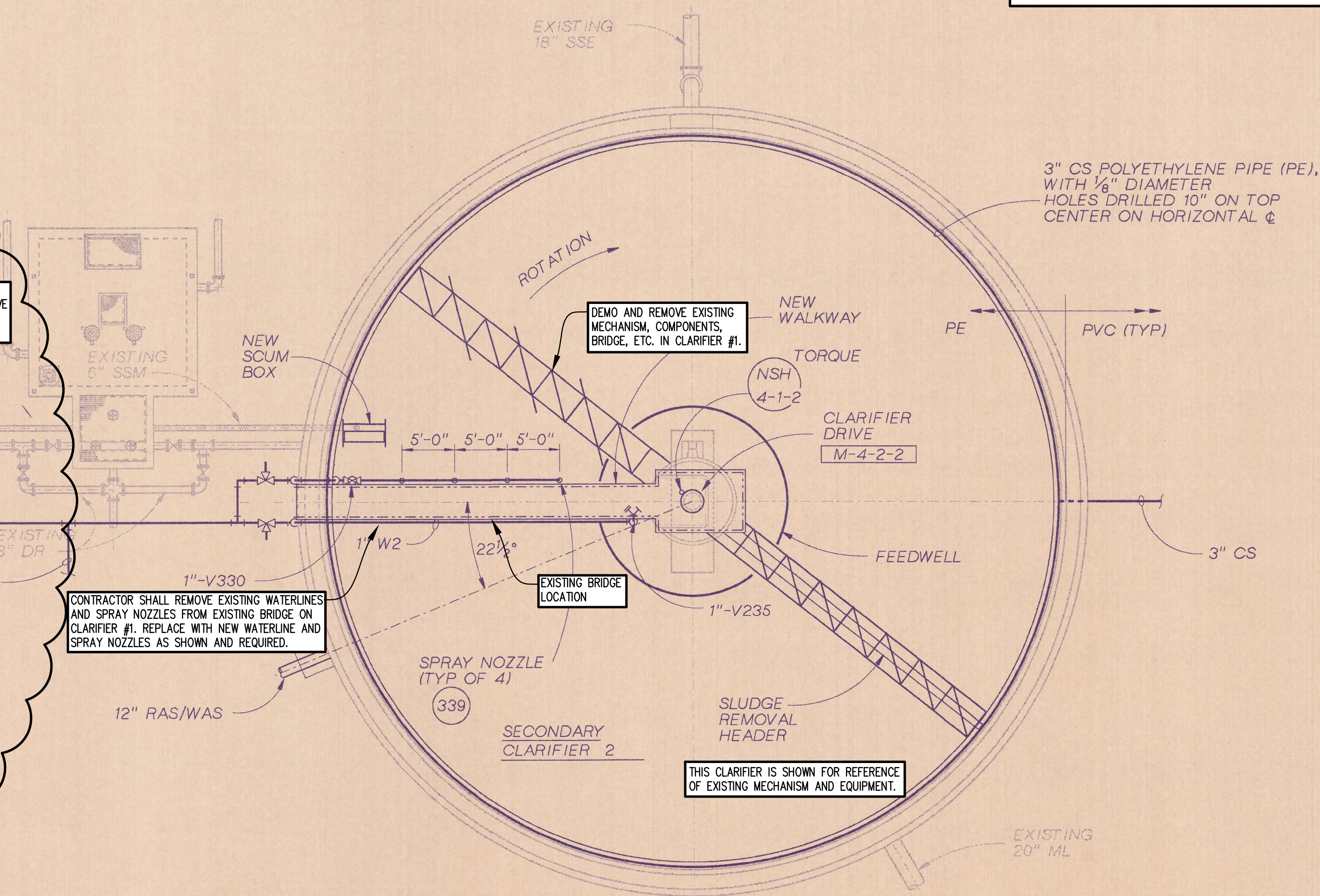
1. CONTRACTOR SHALL REMOVE ENTIRE CLARIFIER MECHANISM, INCLUDING BUT NOT LIMITED TO THE CENTER PIER, ARMS, TRUSSES, INFLUENT WELL, DRIVE, BRIDGE, SCUM BEACH, ETC.
2. EXISTING EFFLUENT WEIRS AND SCUM BAFFLES SHALL REMAIN AND BE REUSED AS IS.
3. CONTRACTOR SHALL REMOVE EXISTING WATERLINE AND SPRAY NOZZLES FROM BRIDGE. REPLACE WITH NEW WATERLINE AND SPRAY NOZZLES AS SHOWN AND REQUIRED.
4. CONTRACTOR SHALL REMOVE CHLORINE SOLUTION LINE AND SUPPORT BRACKETS FROM CLARIFIER WALLS.



BOTTOM PLAN
1/8"=1'-0"

NOTES:

1. ALL INTERIOR COMPONENTS OF EXISTING CLARIFIERS 1 & 2 SHALL BE REMOVED FROM BASIN AS NECESSARY FOR INSTALLATION OF NEW SECONDARY CLARIFIER MECHANISMS. ALL EXISTING ANCHOR BOLTS WILL BE CUT FLUSH WITH CLARIFIER WALL BEFORE INSTALLATION OF NEW EQUIPMENT SUCH AS INFLUENT COLUMNS AND EFFLUENT WEIRS.
2. CLARIFIER DIMENSIONS AND ELEVATIONS ARE BASED ON EXISTING RECORDS AND DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING DIMENSIONS AND ELEVATIONS AS NECESSARY, AND COORDINATING WITH EQUIPMENT SUPPLIERS.
3. EXISTING CLARIFIERS 3 & 4 WILL ALSO RECEIVE 3" CHLORINE SOLUTION AND W2 SYSTEM SIMILAR TO CLARIFIERS 1 & 2.
4. THE WEIRS OF EXISTING CLARIFIERS 3 & 4 WILL BE CAULKED. SEE (331).



TOP PLAN
1/8"=1'-0"

NOTE:

THIS DRAWING WAS CREATED FROM SCANNED AS-BUILT DRAWINGS THAT WERE PRODUCED BY OTHERS WHEN THE ORIGINAL WASTEWATER TREATMENT PLANT WAS CONSTRUCTED AND/OR FROM FUTURE ADDITIONS/MODIFICATIONS. THE SCANNED AS-BUILT DRAWINGS HAVE NOT BEEN VERIFIED AND ARE ONLY BEING PROVIDED FOR GENERAL REFERENCE AND INFORMATIONAL PURPOSES. ANY USE OF THE AS-BUILT DRAWING INFORMATION IS AT THE CONTRACTOR'S SOLE RISK AND NO PAYMENT WILL BE MADE FOR DISCREPANCIES FOUND IN THE FIELD. THE CONTRACTOR SHALL FIELD VERIFY ANY AND ALL PERTINENT INFORMATION AS REQUIRED PRIOR TO BIDDING. THE CONTRACTOR SHOULD EXPECT REAL WORLD CONDITIONS TO DIFFER FROM THE SCANNED AS-BUILT DRAWING.



DSGN B. BROWN
DR 6166m007.dwg
S.M. PASTEUR
CHK E. PRESTEMON
APVD K.S. FITZGERALD

NO. DATE

REVISION

BY APVD

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VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1'
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

SUGAR CREEK WWTP
IMPROVEMENTS
ALEXANDER CITY, ALABAMA

MECHANICAL
SECONDARY CLARIFIERS
TOP AND BOTTOM PLANS

SHEET

DWG NO. M-7
DATE JUNE
PROJ MGM3516
NO.

Municipal Consultants, Inc.
200 Oaklawn Park, South, Suite 212
Birmingham, Alabama 35226
(205) 622-0387

THE CITY OF ALEXANDER CITY
SUGAR CREEK WWTP
CLARIFIER #1 IMPROVEMENTS

2022



06-08-22

BAR = 1"

Title

EXISTING CLARIFIER
PLAN VIEW

BID SET

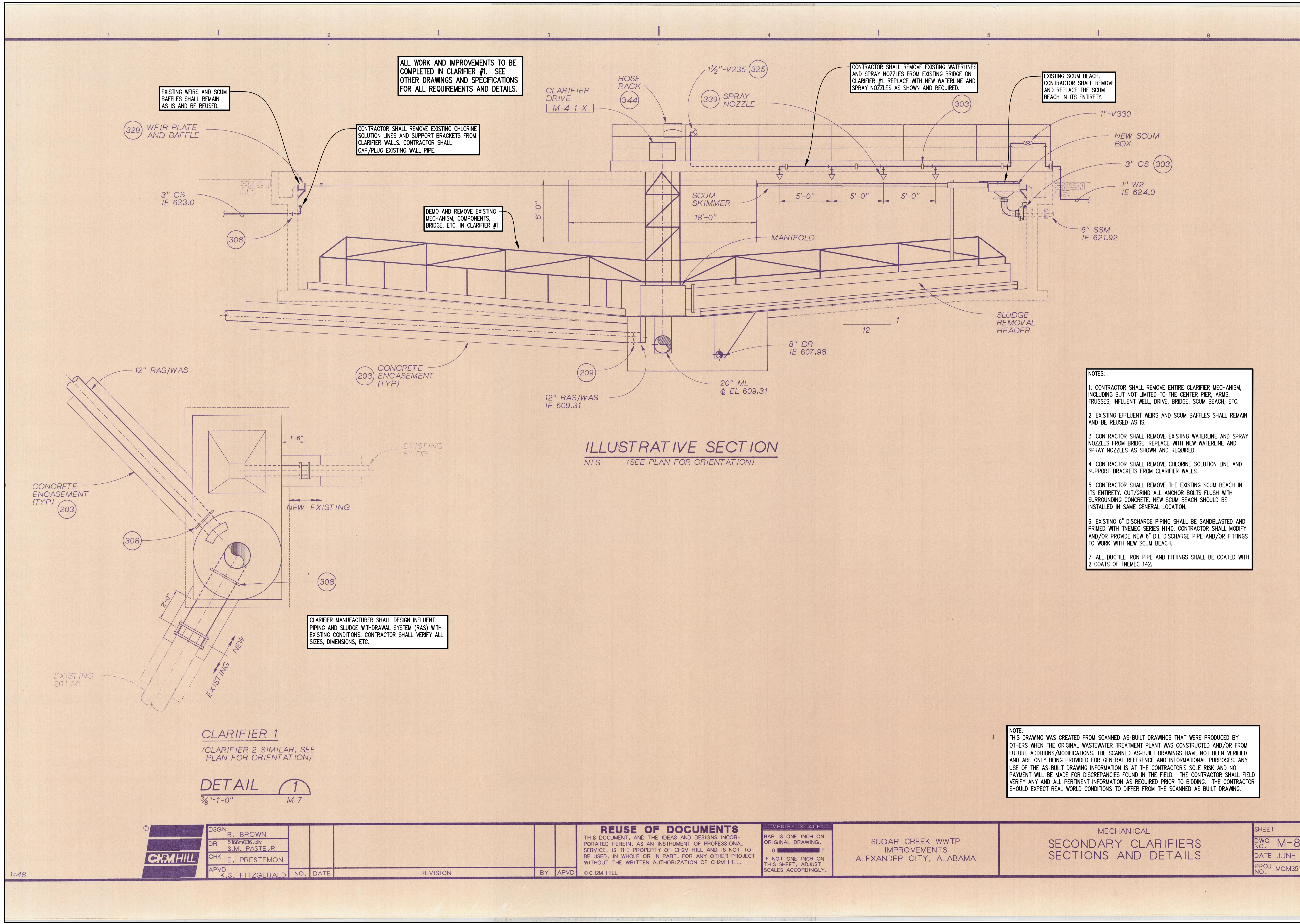
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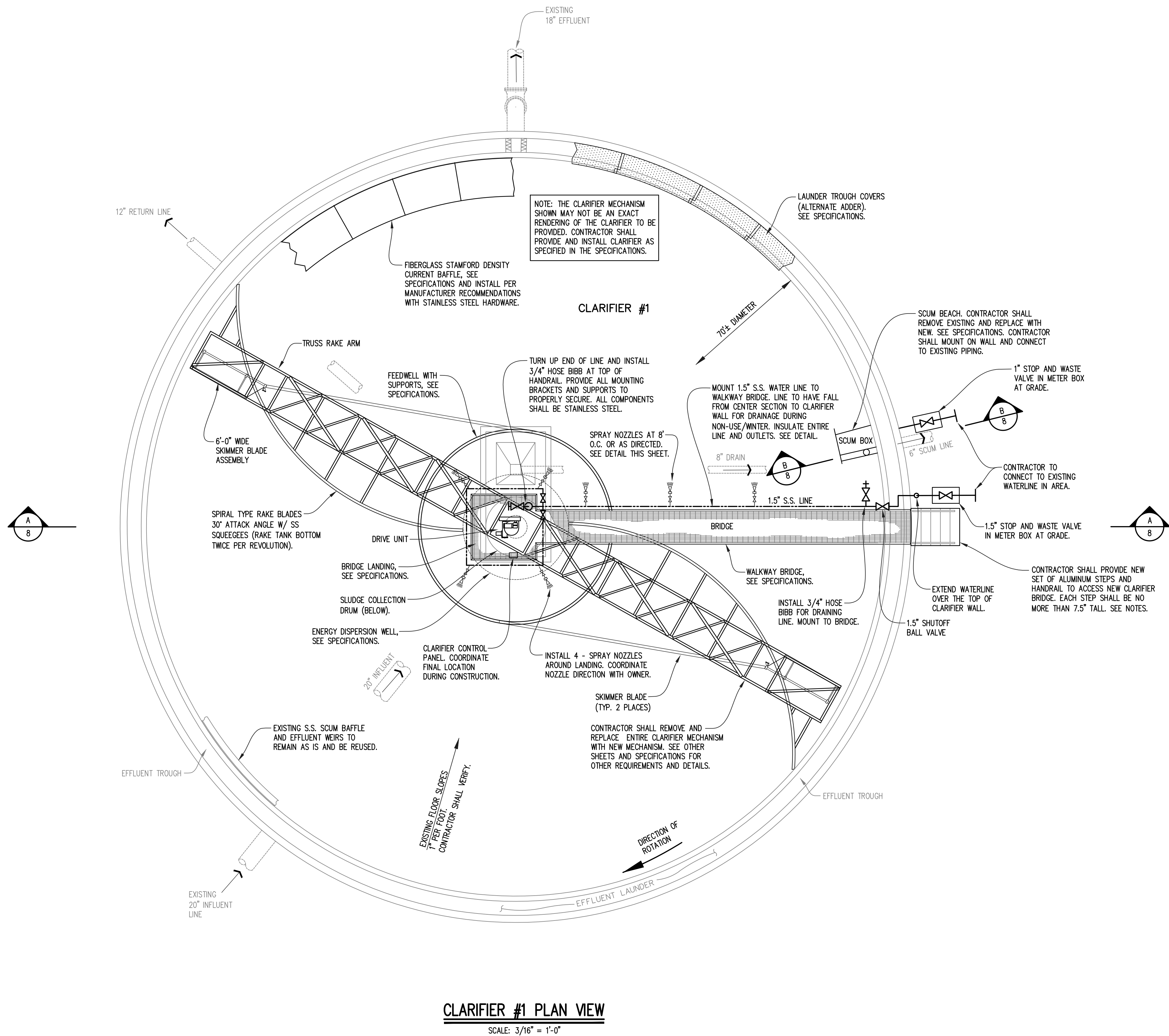
Project No.

Date 6-2022

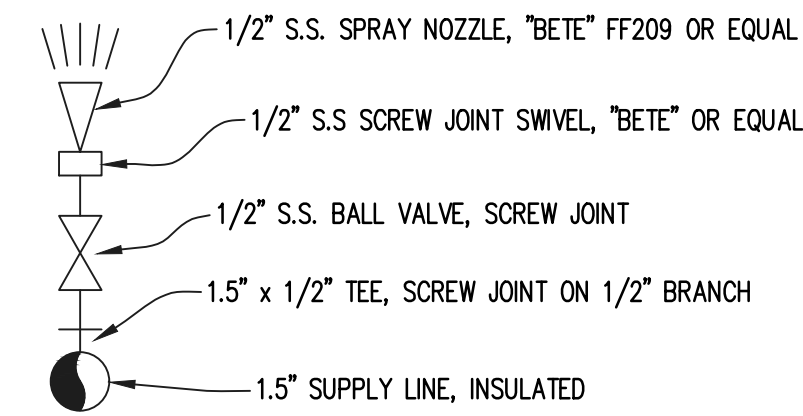
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Sheet 6

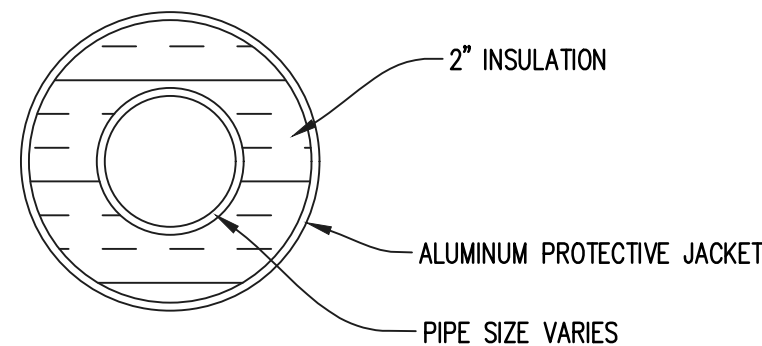




- NOTES:
1. THE CONTRACTOR SHALL REMOVE AND REPLACE THE CLARIFIER MECHANISM IN ITS ENTIRETY WITH NEW EQUIPMENT AS SPECIFIED. THE CONTRACTOR SHALL INSTALL AND MAKE FULLY FUNCTIONAL ALL EQUIPMENT AND COMPONENTS REQUIRED IN ACCORDANCE WITH THE MANUFACTURERS INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS. SEE SPECIFICATIONS FOR EXACT EQUIPMENT TO BE PROVIDED.
 2. CONTRACTOR SHALL PROVIDE ALL OTHER NECESSARY EQUIPMENT AND MATERIALS FOR A COMPLETE INSTALLATION AT NO ADDITIONAL COST TO THE OWNER.
 3. MUCH OF THE INFORMATION IS BASED ON DRAWINGS PREPARED FOR THE CONSTRUCTION OF THE ORIGINAL PLANT AND/OR OTHER ADDITIONS/MODIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR, IN A TIMELY MANNER, VERIFYING ALL EXISTING SIZES, MATERIALS, LOCATIONS, ELEVATIONS, DEPTHS, AND DIMENSIONS OF WALLS, CONCRETE, PIPING, ELECTRICAL, ETC. PRIOR TO ORDERING MATERIALS FOR EQUIPMENT OR OTHER PROPOSED WORK. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, LOCATIONS, ETC. ASSOCIATED WITH THE WORK REQUIRED.
 4. THE CONTRACTOR SHALL BE AWARE THAT EQUIPMENT DIMENSIONS VARY BY MANUFACTURER. CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH APPROVED SHOP DRAWINGS BEFORE ORDERING MATERIALS. COORDINATE ALL WORK WITH EQUIPMENT PROVIDED, EXISTING STRUCTURES, WALLS, FLOORS, ETC, AND ADJUST AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER.
 5. THE CONTRACTOR SHALL COORDINATE WITH OWNER FOR VERTICAL (ELEVATION) CONTROL ONSITE. CONTRACTOR SHALL ESTABLISH VERTICAL CONTROL AROUND CLARIFIER FOR SETTING EQUIPMENT. THE CONTRACTOR SHALL TRANSFER ELEVATION AS REQUIRED FOR WORK TO BE PERFORMED. COORDINATE WITH THE OWNER/ENGINEER.
 6. ALL EXISTING D.I. PIPING IN THE CLARIFIER SHALL BE BRUSH BLASTED, CLEANED, AND PREPARED TO BE PRIMED WITH TNEPEC SERIES N140 OR APPROVED EQUAL. ALL NEW AND EXISTING PRIMED PIPING SHOULD BE COATED WITH 2 COATS OF TNEPEC 142 SPECIFICALLY DESIGNED FOR SEWAGE APPLICATIONS APPLIED OVER TNEPEC PRIMER. FINAL COLOR OF PIPING SHOULD BE BLACK.
 7. ONCE EXISTING CENTER PIER IS REMOVED, CONTRACTOR SHALL CHIP, HAMMER, GRIND, ETC. LEVELING GROUT AS REQUIRED FOR INSTALLATION OF NEW CLARIFIER CENTER PIER. CONTRACTOR SHALL PROVIDE AND INSTALL ALL ANCHOR BOLTS, HARDWARE, EPOXY GROUT AND NON-SHRINK GROUT FOR LEVELING/INSTALLING NEW CENTER PIER AS RECOMMENDED AND REQUIRED.
 8. THE CLARIFIER INFLUENT LINE HAS A MANUAL WEIR GATE IN THE SPLITTER BOX FOR ISOLATION OF CLARIFIER. THE RETURN LINE HAS A VALVE ON IT IN THE RAS PUMP STATION. THE CONTRACTOR SHOULD ASSUME THAT THE GATE AND VALVE WILL LEAK AND THERE WILL BE A CONTINUOUS STREAM OF FLOW ENTERING THE INFLUENT PIPE AND RETURN LINE OF THE CLARIFIER DURING CONSTRUCTION. THE CONTRACTOR SHOULD PLAN TO SANDBAG, BARRICADE, SEAL, PLUG, ETC. GATE OR LINE TO LIMIT THE INCOMING FLOW OR PLAN TO PUMP OUT PIPES AS REQUIRED FOR COMPLETION OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO HANDLE ALL FLOW OR BACKUP FLOW INTO THE CLARIFIER DURING CONSTRUCTION.
 9. THE CONTRACTOR SHALL CLEAN, PRESSURE WASH, ETC. ALL PORTIONS OF THE CLARIFIER WALLS, TROUGHS, FLOOR, PIPES, ETC. TO PERFORM WORK REQUIRED.
 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEWATERING OF CLARIFIER REQUIRED DURING THE PROJECT.
 11. THE CONTRACTOR SHALL PROVIDE ALL BRACKETS AND ATTACHMENT HARDWARE REQUIRED. ALL BRACKETS AND HARDWARE REQUIRED SHALL BE STAINLESS STEEL.
 12. CONTRACTOR SHALL MAKE CONNECTION TO EXISTING WATERLINE IN THE AREA OF CLARIFIERS. CONTRACTOR SHALL PROVIDE ALL FITTINGS, REDUCERS, VALVES, BENDS, ETC. FOR PROPER CONNECTION.
 13. CONTRACTOR SHALL PROVIDE AND INSTALL NEW SET OF ALUMINUM STEPS (36" WIDE MINIMUM) AND HANDRAIL TO ACCESS NEW CLARIFIER BRIDGE. STEPS AND HANDRAIL SHALL BE PROVIDED BY THOMPSON FABRICATING CO. HANDRAIL SHALL BE 1.5" ALUMINUM POSTS AND RAILS. STEPS SHALL BE PROVIDED TO ACCESS BRIDGE. CONTRACTOR SHALL VERIFY AND COORDINATE ALL ELEVATIONS, DIMENSION, HEIGHTS, ETC. EACH STEP SHALL BE NO MORE THAN 7.5".



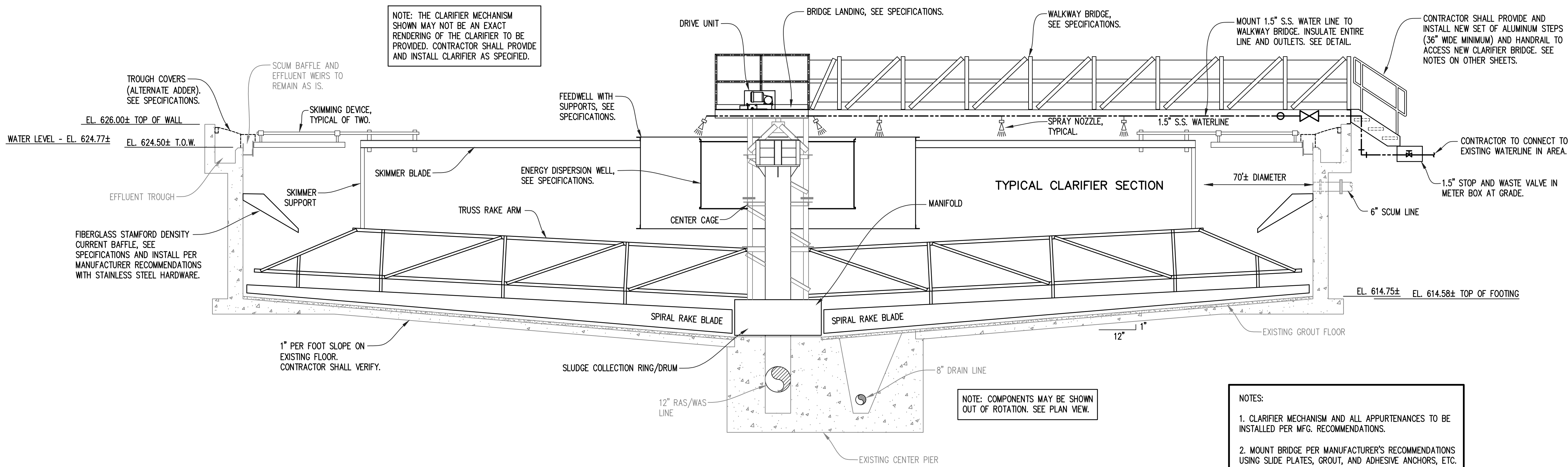
SPRAY NOZZLE DETAIL
NO SCALE



- NOTES:
1. INSULATE ALL EXPOSED WATER PIPING AND VALVES \leq 2" IN DIAMETER.
 2. JACKETING TO BE JOHNS MANVILLE - ALUMINUM ROLL AND SHEET. PROVIDE INSULATED JACKETS FOR ALL FITTINGS AND VALVES.
 3. INSULATION TO BE 2" MANVILLE MICROLOK
 4. INSTALL ALL COMPONENTS IN STRICT ACCORDANCE WITH MFR'S RECOMMENDATIONS
 5. RESERVED
 6. ALL PIPE INSULATION & JACKETING SHALL BE PROFESSIONALLY INSTALLED FOR NEAT APPEARANCE AND FOR LONG TERM DURABILITY.
 7. PROVIDE PIPE SUPPORTS AND BRACING SPECIFICALLY DESIGNED FOR INSULATED PIPE INSTALLATIONS.

PIPE INSULATION DETAIL
SCALE: N.T.S.

<div>Municipal Consultants, Inc.<div>200 Century Park South, Suite 212 Birmingham, Alabama 35226 (205) 622-0387</div></div>				<div>THE CITY OF ALEXANDER CITY SUGAR CREEK WWTP CLARIFIER #1 IMPROVEMENTS</div>				<div>2022</div>			
<div>06-08-22</div>				<div>ALABAMA LICENSED PROFESSIONAL ENGINEER NO. 33658 TIMOTHY R. TURNER</div>				<div>NOT VALID WITHOUT SIGNATURE</div>			
<div>BAR = 1"</div>											
<div>Drawing</div>				<div>Title</div>							
<div>Project No.</div>				<div>CLARIFIER #1 PLAN VIEW</div>							
<div>Date</div>				<div>6-2022</div>							
<div>Scale</div>				<div>3/16" = 1'</div>							
<div>Sheet</div>				<div>8</div>				<div>BID SET</div>			



SECTION "A-A"

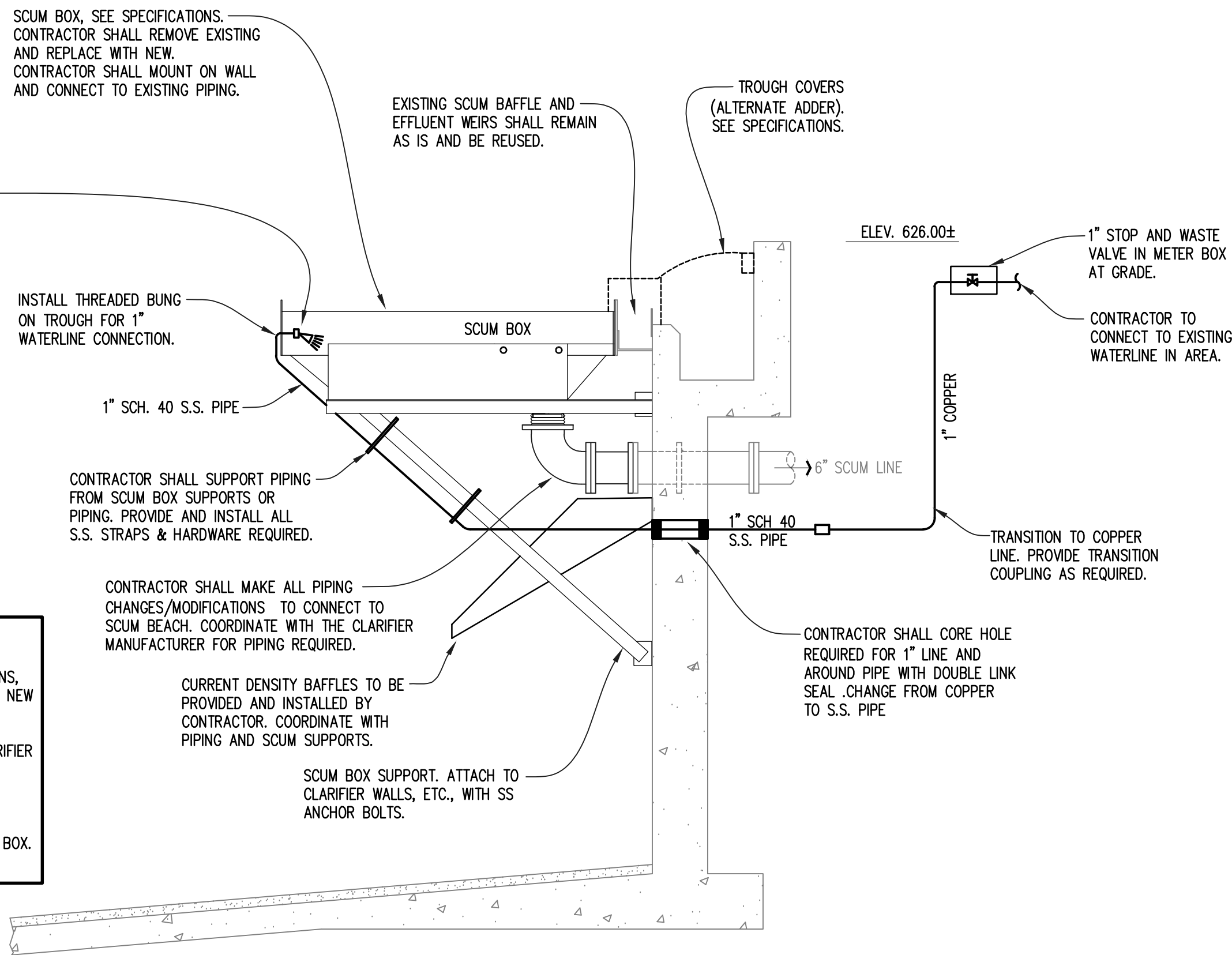
SCALE: 1/4" = 1'-0"

SPRAY NOZZLE AT SCUM TROUGH

1. SPRAY NOZZLE SHALL BE A DIRECTIONAL NOZZLE WITH A TIGHT CONICAL SPRAY PATTERN SIMILAR TO "BETE" FF209.
2. INSTALL THREADED BUSHING THROUGH SIDE OF TROUGH OR WELD THREADED BUNG TO TROUGH.
3. USE 1" S.S. SUPPLY LINE.
4. ENTIRE SPRAY NOZZLE ASSEMBLY SHALL BE BELOW WIPER BLADE AND NOT INTERFERE WITH CLARIFIER MECHANISM.
5. COORDINATE WITH CLARIFIER MANUFACTURER.
6. ALONG WITH THE SPRAY NOZZLE, THE CONTRACTOR SHALL PROVIDE A S.S. SWIVEL JOINT FOR DIRECTING THE SPRAY NOZZLE.

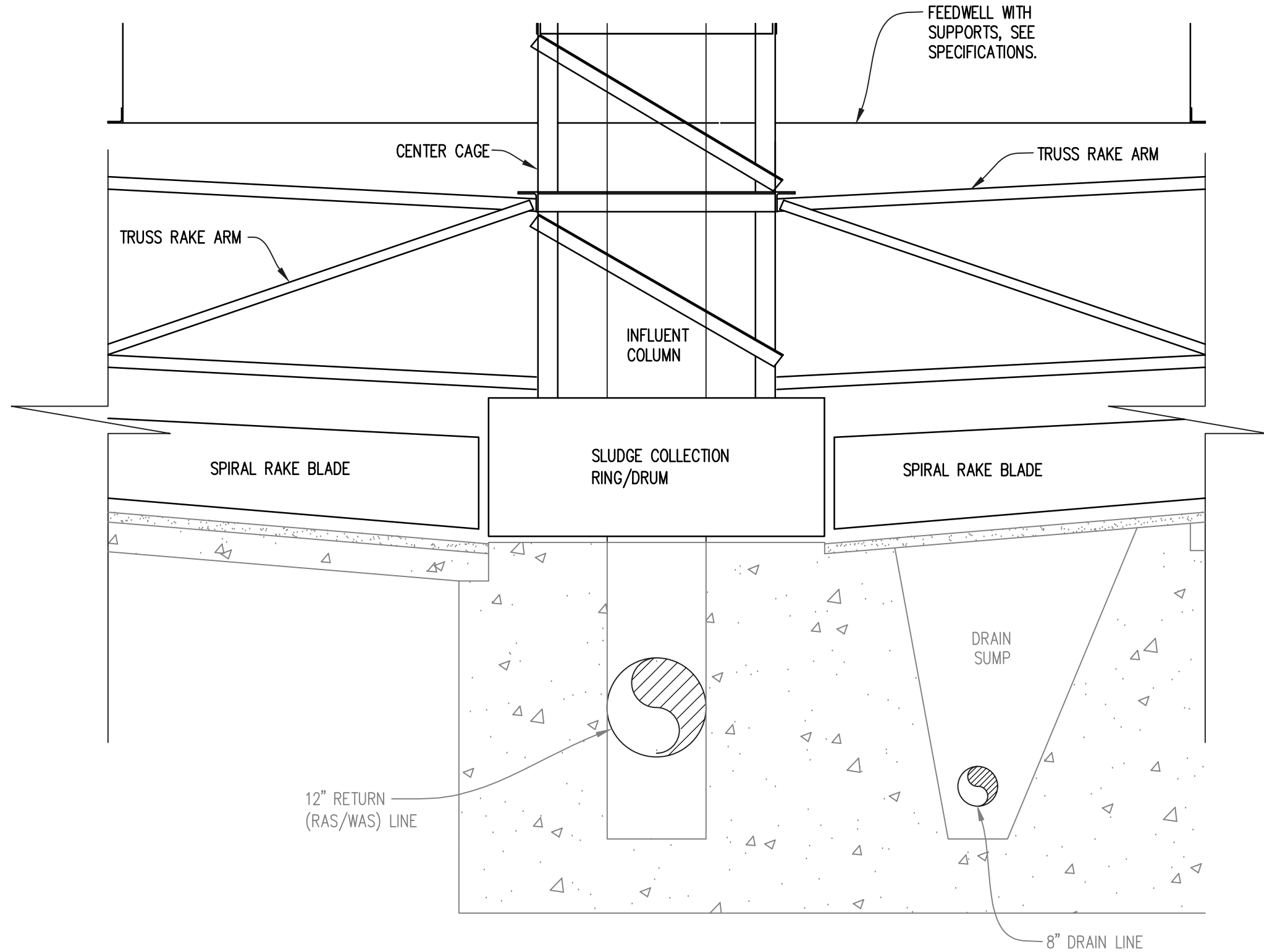
NOTES:

1. COORDINATE PIPING DIMENSIONS, LOCATIONS, ELEVATIONS, AND OTHER REQUIREMENTS WITH EXISTING CLARIFIER AND NEW CLARIFIER SHOP DRAWINGS.
2. ALL PIPING & MISCELLANEOUS EQUIPMENT WITHIN CLARIFIER STRUCTURE TO BE INSTALLED WITH STAINLESS STEEL HARDWARE.
3. CONTRACTOR SHALL PROVIDE ALL SCUM PIPING AND FITTINGS REQUIRED TO MAKE CONNECTION TO NEW SCUM BOX. ALL PIPING AND FITTINGS SHALL BE DUCTILE IRON.



SECTION "B-B" AT SCUM BOX

SCALE: 1/2" = 1'-0"



PLAN - CENTER SECTION

SCALE: 1/2" = 1'-0"

NOTES:

1. COORDINATE WITH EXISTING DRAWINGS FOR ELEVATIONS, DIMENSIONS, LOCATIONS, AND OTHER INFORMATION REGARDING THE EXISTING CLARIFIER. CONTRACTOR SHALL VERIFY ALL.
2. THE CONTRACTOR SHALL DRILL AND EPOXY NEW ANCHOR BOLTS AS REQUIRED TO SET NEW CLARIFIER CENTER PIER AND MECHANISM. CONTRACTOR SHALL PROVIDE ALL EPOXY AND STAINLESS STEEL ANCHOR BOLTS AS REQUIRED BY THE CLARIFIER MANUFACTURER.
3. THE EXISTING CLARIFIER MECHANISM IS A TOW-BRO STYLE CLARIFIER WITH A ROTATING SLUDGE RING/MANFOLD. THE CONTRACTOR/CLARIFIER MANUFACTURER SHALL PROVIDE ALL MATERIALS NEEDED TO CONNECT TO OR WORK WITH THE EXISTING FOR THE NEW CLARIFIER MECHANISM. COORDINATE ALL.



06-08-22

BAR = 1"

Title

CLARIFIER #1
SECTION VIEWS

BID SET

Drawing

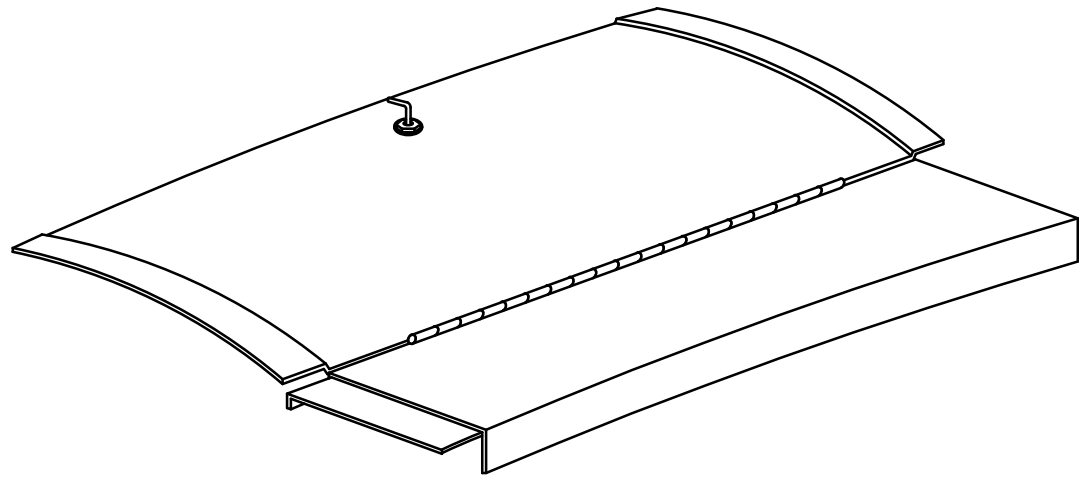
Project No.

Date 6-2022

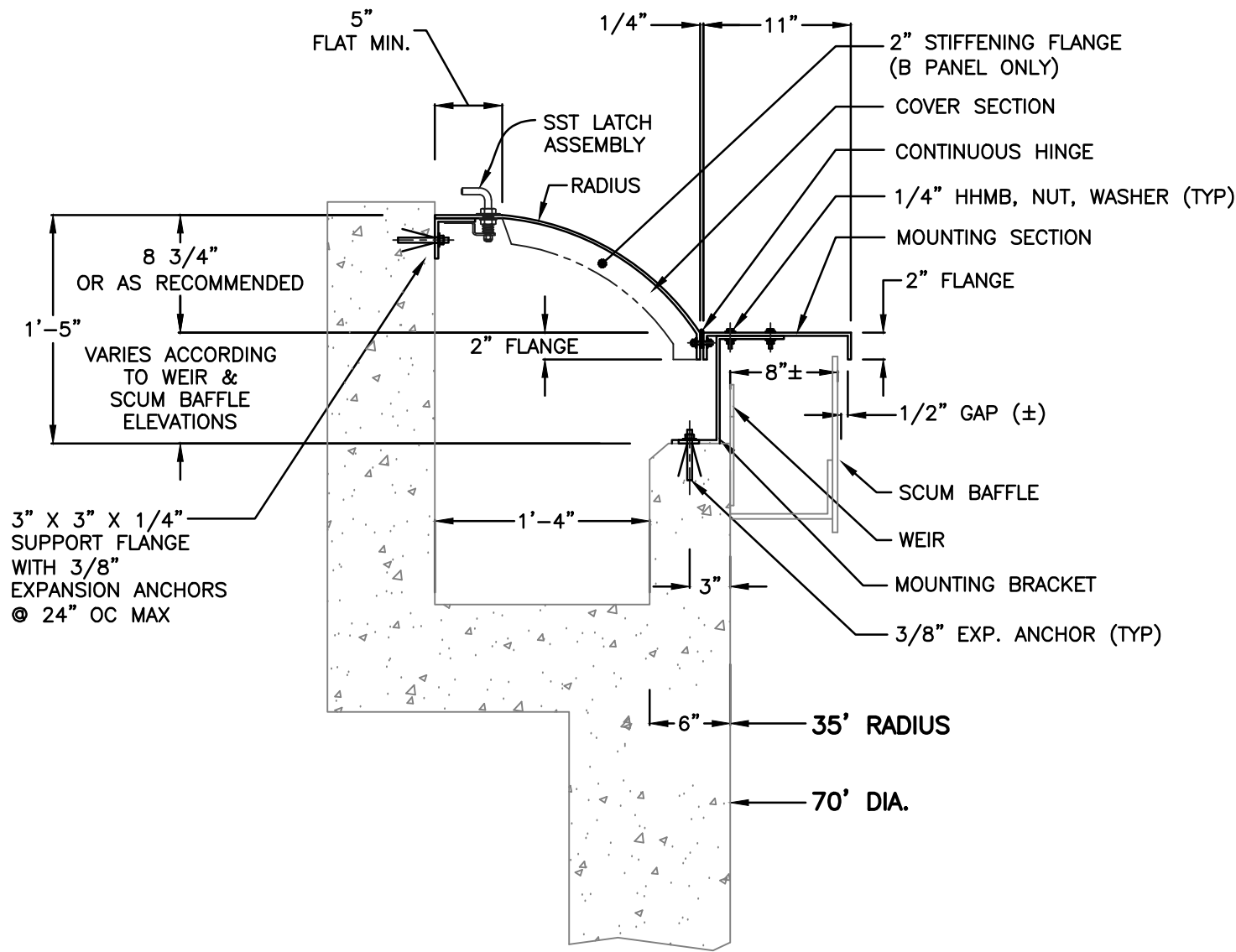
Scale 1/4" = 1'

Sheet

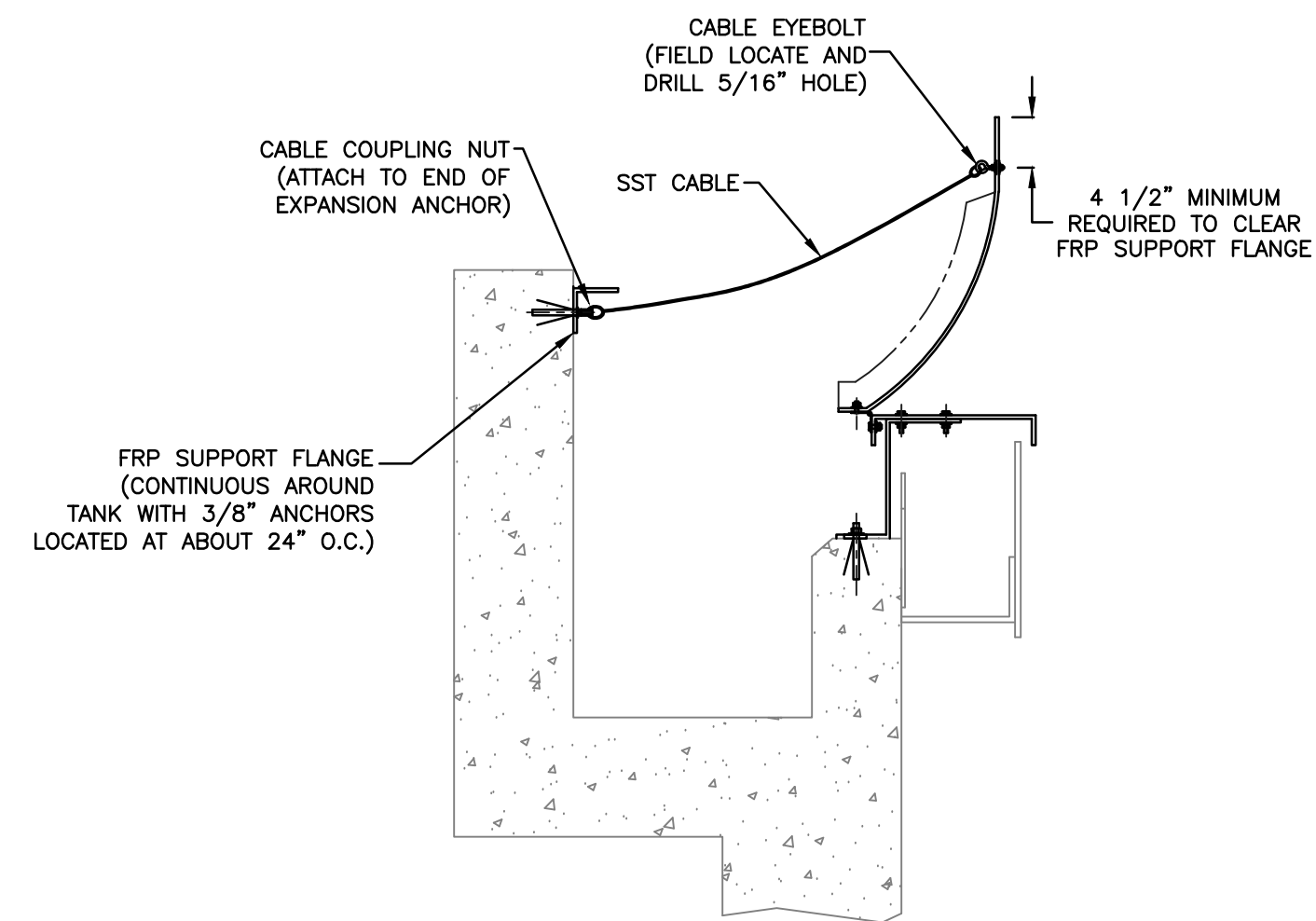
9



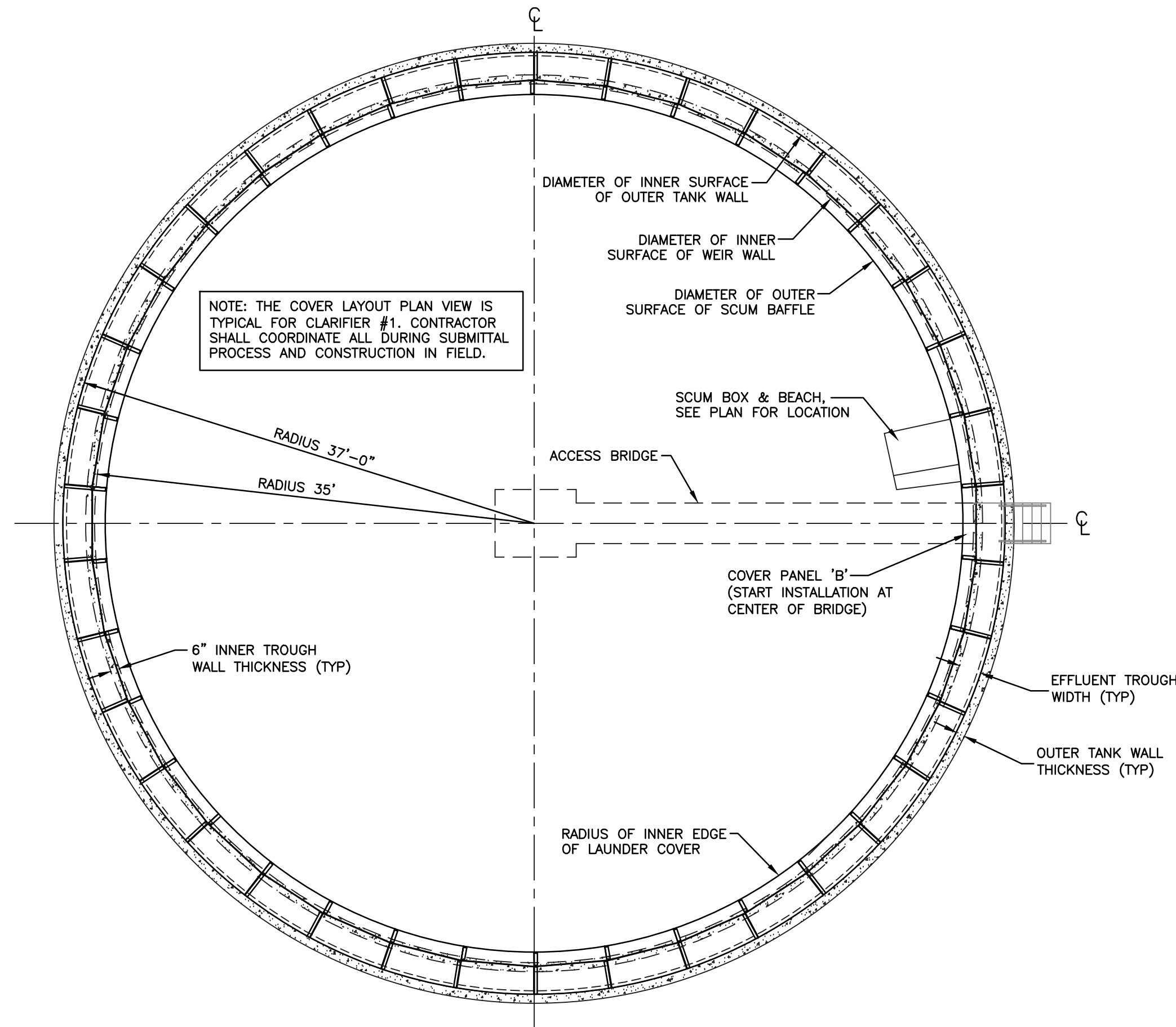
PERSPECTIVE VIEW



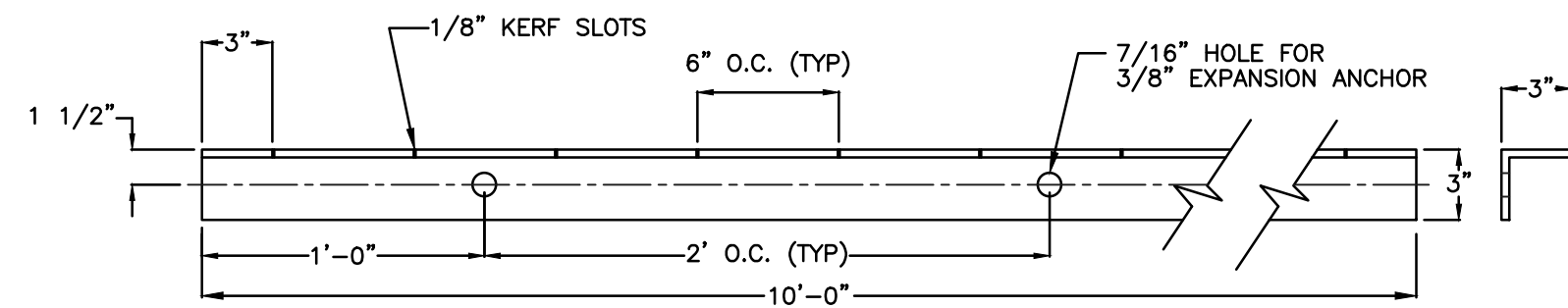
SECTION A-A



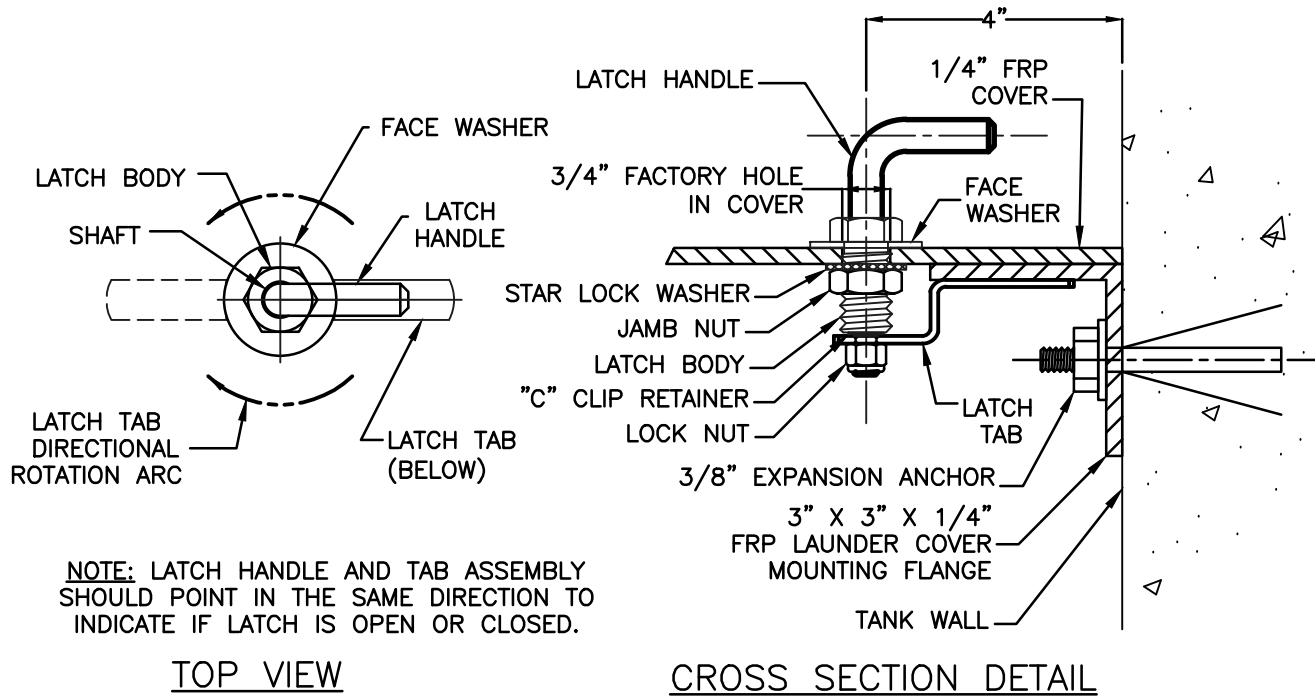
COVER CABLE RESTRAINT ASSEMBLY



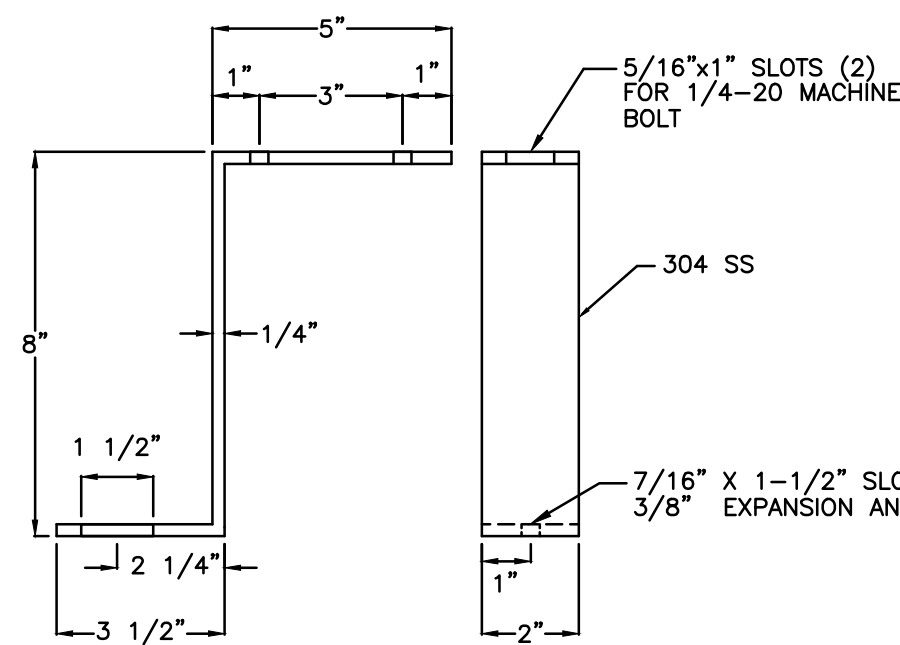
COVER LAYOUT PLAN VIEW
(NO SCALE)



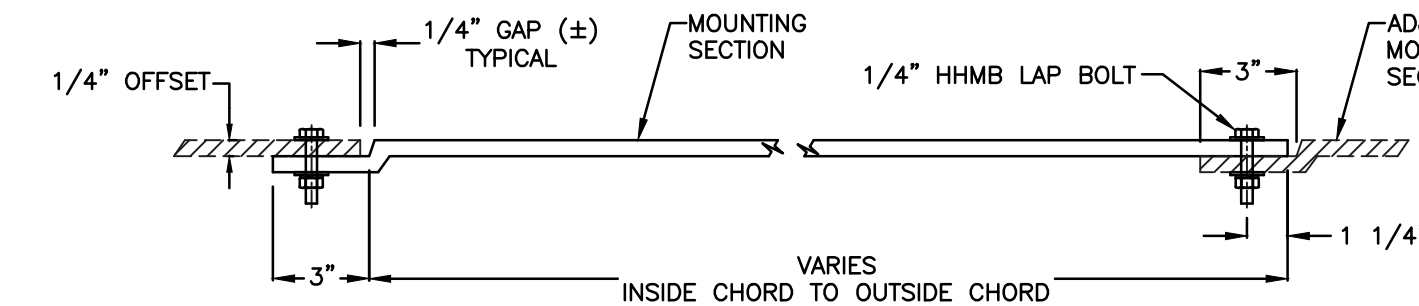
FRP SUPPORT FLANGE



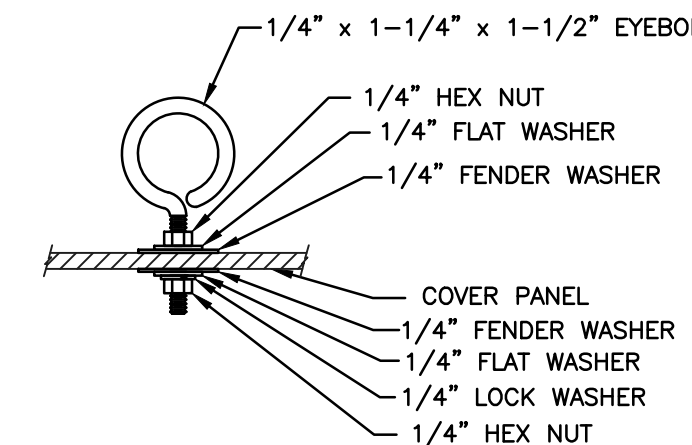
"A" PANEL LATCH



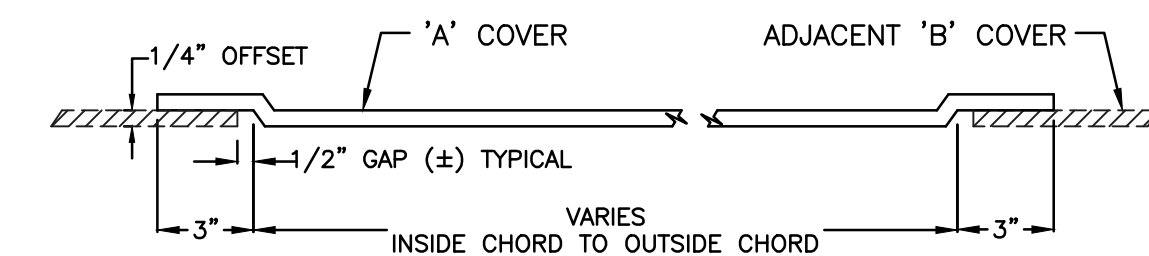
MOUNTING BRACKET



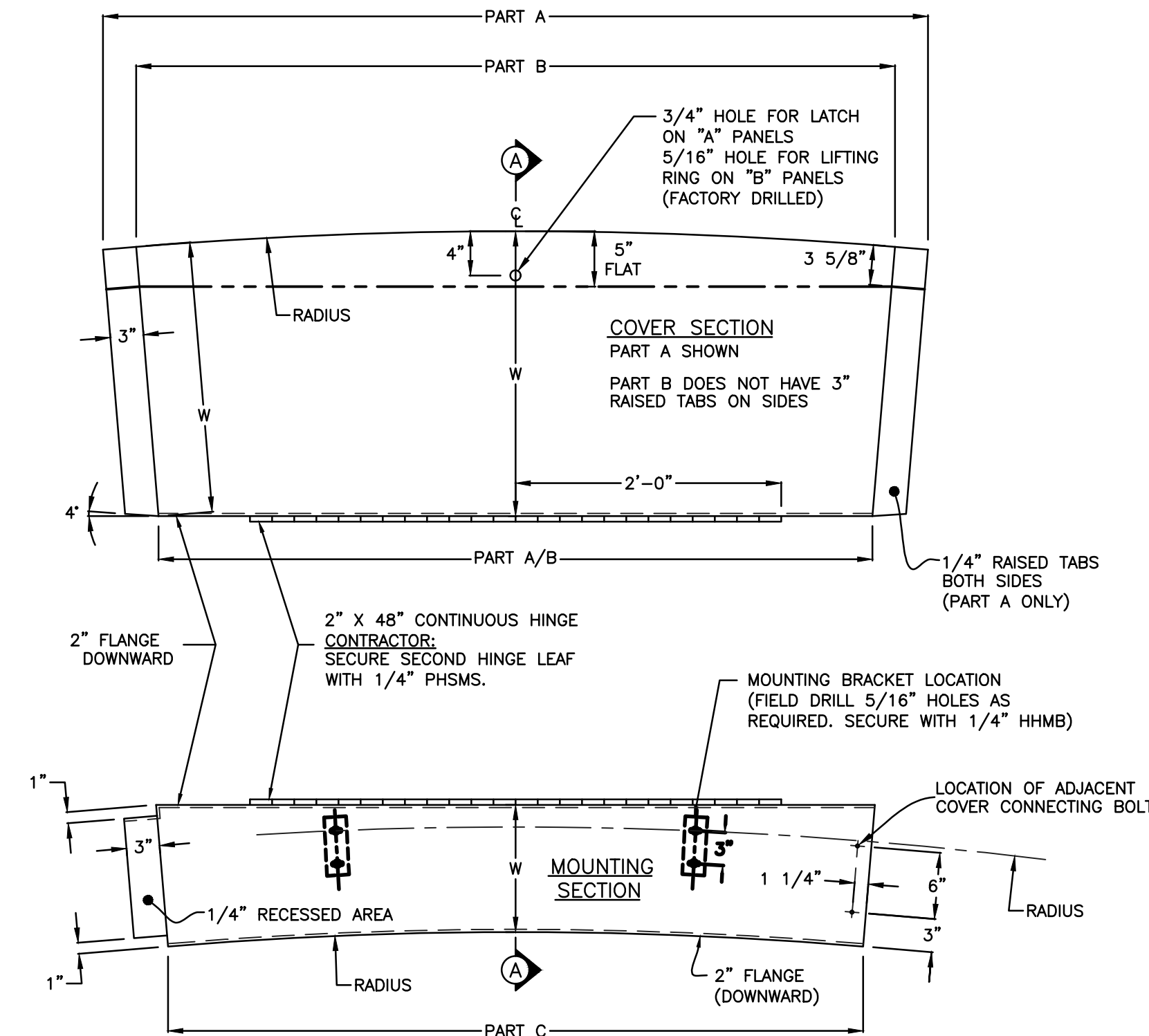
MOUNTING SECTION
RECESSED TAB PROFILE



"B" PANEL LIFTING RING



RAISED TAB PROFILE



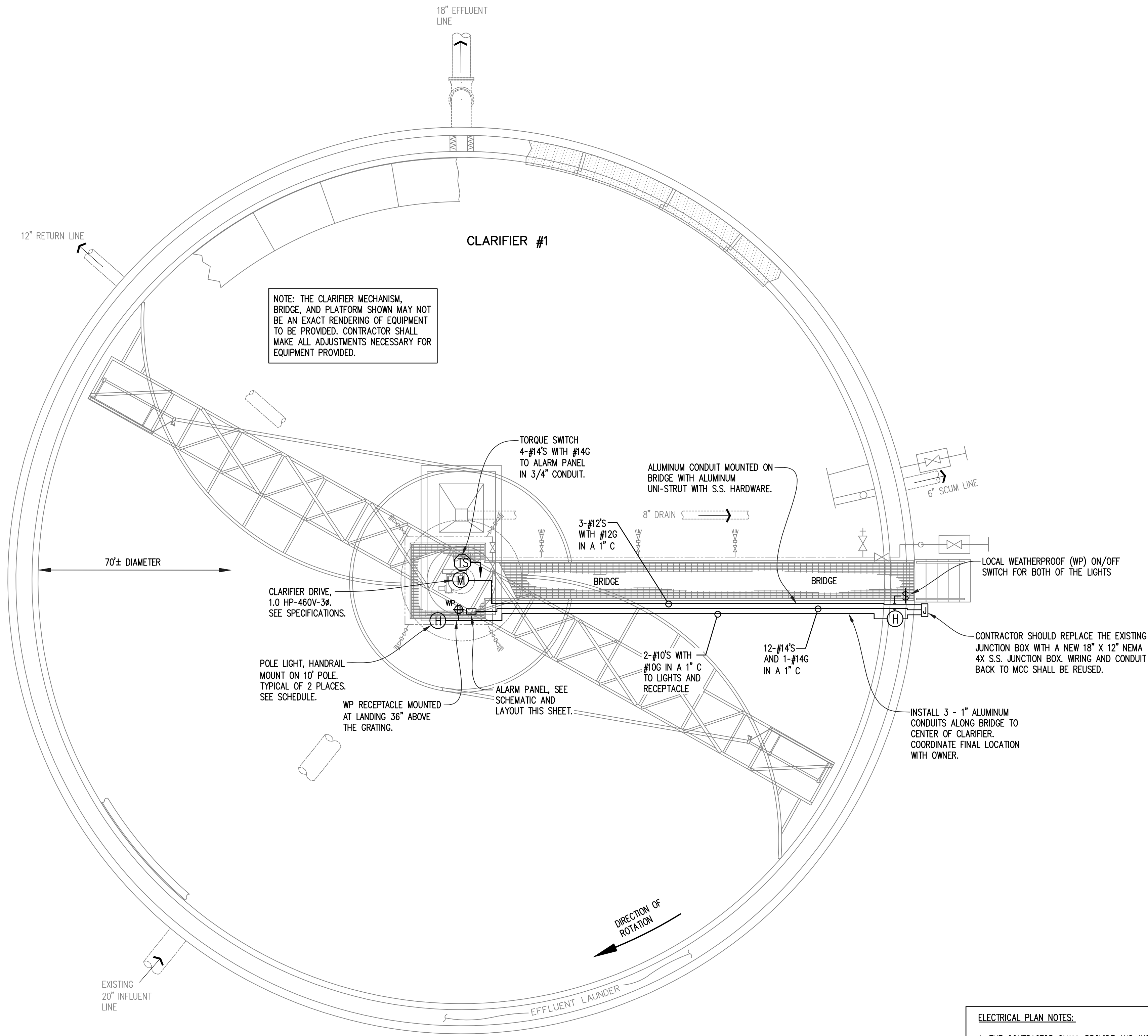
LAUNDRY COVER PANEL UNIT
TOP VIEW

- NOTES:
1. DIAMETER AT COVER = SEE PLANS, 70'-0" VERIFY
 2. COVER PANELS ARE CHOPPED STRAND FRP WITH 1/4" MINIMUM THICKNESS
 3. MINIMUM 20 MIL GELCOAT ON UPPER PANEL SURFACE (MARINE WHITE COLOR)
 4. 357-211 PLN CTC GLASS REINFORCEMENT OR EQUIVALENT. ADDITIONAL SUPPORT/REINFORCEMENT AS REQ'D.
 5. COREZYN, COR75-AQ-010, ISOPHTHALIC RESIN OR OR EQUIVALENT, WITH MINIMUM .05% BLACK PIGMENT, MAX 5% FILL AND UV SUPPRESSED
 6. PARTS SHALL BE OPAQUE BLACK BENEATH GELCOAT SURFACE, WITH NO FIBER SHOWING
 7. GELCOAT TO BE MARINE WHITE
 8. LAMINATE SHALL NOT HAVE LESS THAN 30% GLASS CONTENT
 9. ONE-EIGHTH INCH RADIUS ON ALL CORNERS
 10. PARTS ARE KNIFE TRIMMED, WITH EDGES SANDED AND HOT COATED
 11. MOUNTING HOLES ARE FIELD DRILLED (7/16")
 12. ALL FASTENERS ARE 304 SST UNLESS OTHERWISE NOTED
 13. FIELD CUT PANELS AS REQUIRED PER MANUFACTURERS INSTRUCTIONS
 14. EACH PANEL SHALL HAVE THE FOLLOWING MINIMUM PHYSICAL PROPERTIES:
- | PROPERTY | TEST | MINIMUM VALUE |
|---------------------|-------------|-------------------------|
| TENSILE STRENGTH | ASTM D-638 | 12,000 PSI |
| FLEXURAL STRENGTH | ASTM D-790 | 20,000 PSI |
| FLEXURAL MODULUS | ASTM D-790 | 1.0x10 ⁶ PSI |
| BARREL HARDNESS | ASTM D-2583 | 40 |
| NOTCHED IZOD IMPACT | ASTM D-256 | 12 FT-LBS/IN |
| WATER ABSORPTION | ASTM D-570 | 0.2% |

THESE COVERS ARE AN
ALTERNATE ADDER. SEE BID
DOCUMENTS AND SPECIFICATIONS.



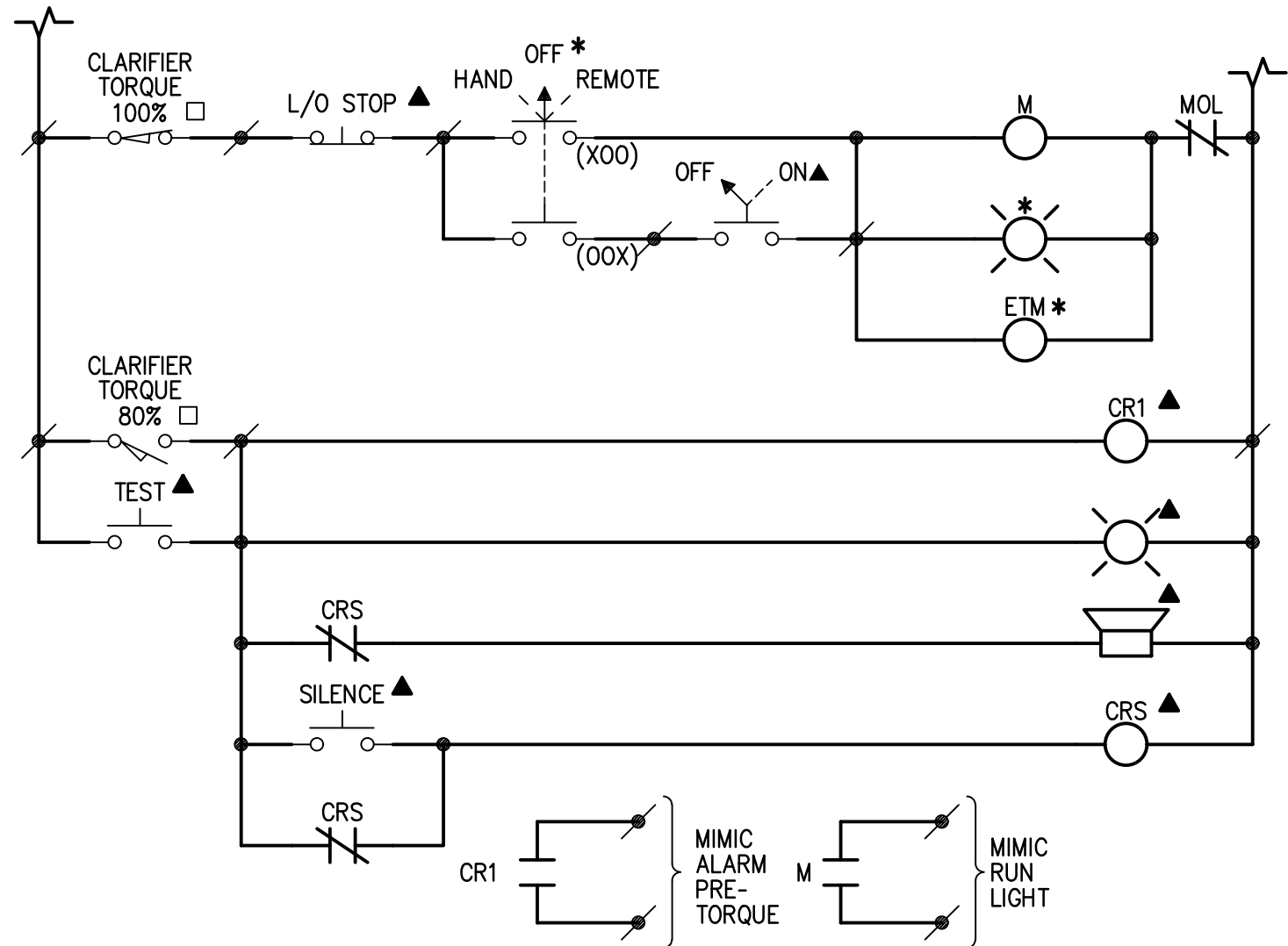
LIGHTING FIXTURE SCHEDULE						
MARK	FIXTURE MFG	CATALOG NO.	LAMPS			REMARKS
			NO./FIX	WATTS-LUMENS	TYPE	
H	LITHONIA	TWO (2) - DSX0-LED-P3-40K-T5M-120-RPA-PER-DNATXD-DLL127F1.5JU	MULTI	71W 8770 LUMENS	LED	MOUNT TO 10' SWIVELPOLE, ALUMINUM POLE S3-3000-T SECURED TO HANDRAIL AND/OR BRIDGE. PROVIDE ALL COMPONENTS REQUIRED.



CLARIFIER #1 ELECTRICAL PLAN
SCALE: 3/16" = 1'-0"

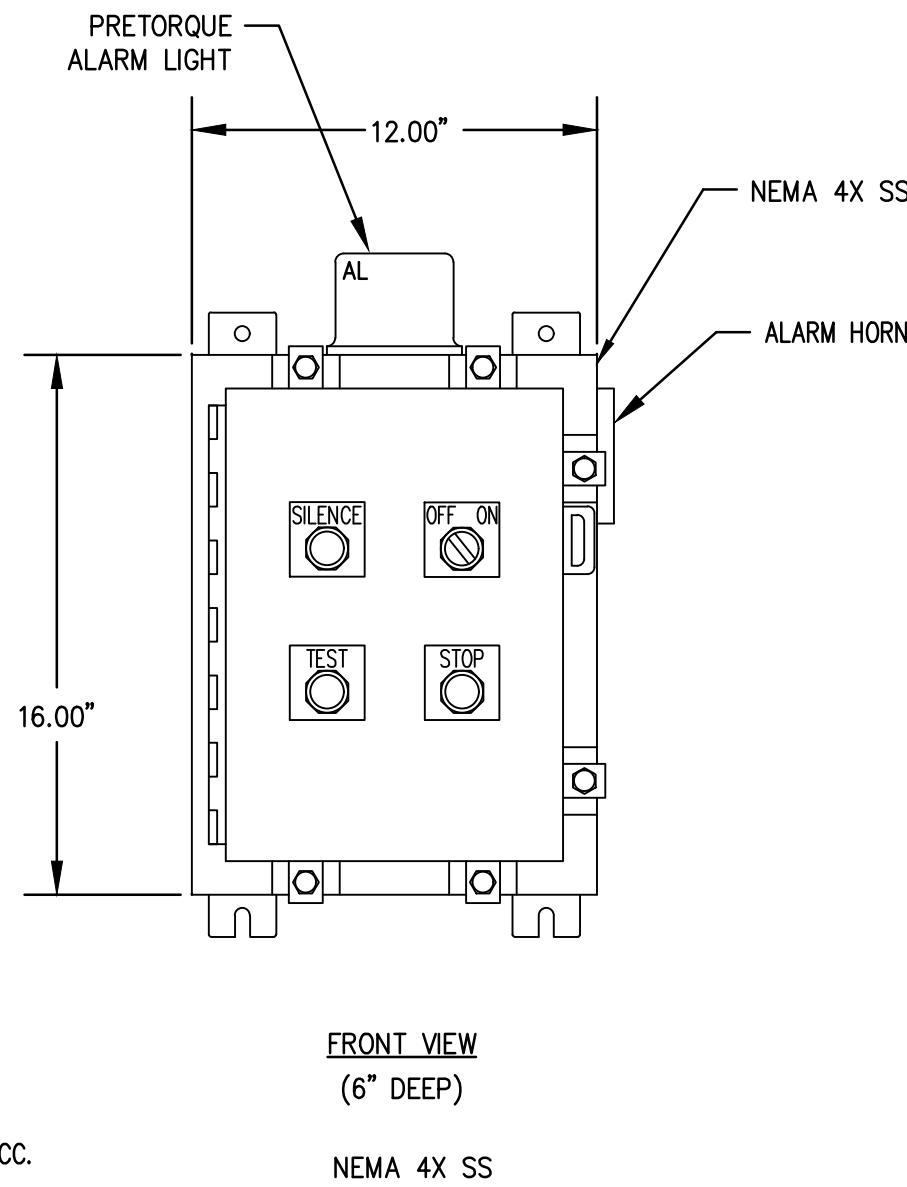
ELECTRICAL PLAN NOTES:

1. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL CONDUIT, WIRING, ETC. FROM JUNCTION BOX SHOWN TO CLARIFIER ALARM PANEL, RECEPTACLE, LIGHTS, MOTOR, ETC. COORDINATE ALL FINAL LOCATIONS WITH THE OWNER. PROVIDE 18' OF SPARE WIRE INSIDE OF JUNCTION BOX. ALL POWER WIRING INSTALLED SHALL BE TYPE RHH.
2. CONDUITS FOR ALL EQUIPMENT, FIXTURES, RECEPTABLES, SWITCHES, ETC. SHALL BE MOUNTED TO BRIDGE. CONDUITS TO BE RUN NEAT, PLUMB, LEVEL, ETC. TO THE MAXIMUM EXTENT POSSIBLE. INSTALL CONDUIT SO IT DOES NOT CREATE TRIPPING HAZARDS. ABSOLUTELY NO TRIPPING HAZARDS WILL BE ALLOWED.
3. ALL EXPOSED CONDUIT, BOXES, FITTINGS, ETC. SHALL BE ALUMINUM UNLESS NOTED OTHERWISE.
4. ALL CONDUIT, PANELS, SWITCHES, RECEPTABLES, ETC. SHALL BE INSTALLED AND PROPERLY SUPPORTED USING ALUMINUM OR STAINLESS STEEL UNI-STRUT, STRUCTURAL MEMBERS, ETC. OR AS APPROVED BY THE ENGINEER. ALL ALUMINUM MOUNTED TO CONCRETE SHALL BE COATED WITH A BITUMASTIC COATING. PROVIDE ALL SUPPORTS, BRACKETS, ETC. AS REQUIRED TO SUPPORT CONDUIT(S).
5. ALL ATTACHMENT HARDWARE (I.E. BOLTS, NUTS, ANCHOR BOLTS, WASHERS, ETC.) SHALL BE STAINLESS STEEL.
6. ALL RECEPTABLES, LIGHTS, SWITCHES, ETC. ARE NOT SHOWN IN EXACT LOCATIONS. FIELD COORDINATE WITH OWNER/ENGINEER FOR LOCATIONS DURING CONSTRUCTION. VERIFY EXACT LOCATION PRIOR TO INSTALLING CONDUITS. RECEPTABLES AND SWITCHES SHALL BE INSTALLED IN ALUMINUM WEATHERPROOF ENCLOSURES RATED FOR ATMOSPHERE.
7. THE CONTRACTOR SHALL PROVIDE CONDUCTORS, CONDUITS, TERMINATIONS, JUNCTION BOXES, ETC. AS REQUIRED BY NEC, THE EQUIPMENT SUPPLIED, AND AS REQUIRED FOR A COMPLETE INSTALLATION.
8. THE CONTRACTOR SHALL PROVIDE A 20A DUPLEX GFCI WATERPROOF (WP) RECEPTACLE AT THE CENTER OF THE CLARIFIER. RECEPTACLE SHOULD BE MOUNTED 36" ABOVE THE GRATING ON HANDRAIL.
9. THE CONTRACTOR SHALL GROUND NEW BRIDGE AND PLATFORM TO THE EXISTING GROUNDING SYSTEM WITH #4/0 BARE GROUND CABLES AND CADWELD CONNECTIONS. COORDINATE WITH THE OWNER. BRIDGE/PLATFORM SECTIONS SHALL BE CONTINUOUS. CONTRACTOR SHALL VERIFY.
10. THE EXISTING CLARIFIER IS CURRENTLY POWERED AND CONTROLLED FROM THE WWTP. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER/ENGINEER TO PROPERLY COORDINATE EXISTING CONTROLS AND SIGNALS WITH NEW CONTROLS AND SIGNALS TO BE PROVIDED. CONTRACTOR SHALL VERIFY ALARMS, SIGNALS, ETC. ONCE COMPLETE.
11. THERE ARE EXISTING LIGHTS AND RECEPTABLES USED AND POWERED ON THE EXISTING CLARIFIER. THE CONTRACTOR SHALL UTILIZE THE EXISTING CIRCUITS/BREAKERS TO POWER NEW LIGHTS AND RECEPTABLES SHOWN. THE CONTRACTOR SHALL COORDINATE ALL WITH THE OWNER/ENGINEER. CONTRACTOR SHALL PROVIDE ALL NECESSARY WIRING, CONDUIT, MATERIALS, ETC. AS REQUIRED.



LEGEND
▲ LOCATED IN CLARIFIER ALARM PANEL
* LOCATED IN MCC
□ LOCATED AT CLARIFIER DRIVE

CLARIFIER SCHEMATIC



CLARIFIER ALARM PANEL